DOCUMENT RESUME

ED 336 070 IR 015 077

AUTHOR	Dalbotten, Mary, Ed.
TITLE	Model Learner Outcomes for Educational Media and Technology.
INSTITUTION	Minnesota State Dept. of Education, St. Paul. Instructional Design Section.
PUB DATE	89
NOTE	78p.; For a related curriculum guide, see IR 015 076.
AVAILABLE FROM	Minnesota Curriculum Services Center, 70 West County Rd. B2, Little Canada, MN 55117 ($5.50, state residents; $8.00 out of state).
PUB TYPE	Guides - Non-Classroom Use (055)
EDRS PRICE	MF01/PC04 Plus Postage.
DESCRIPTORS	Behavioral Objectives; *Course Integrated Library Instruction; Curriculum Development; *Educational Media; Elementary Secondary Education; Information Sources; *Learning Resources Centers; Library Materials; Media Selection; Media Specialists; Models; *Objectives; State Boards of Education
IDENTIFIERS	Librarian Teacher Cooperation; Model Learner Outcomes

ABSTRACT

The first of four chapters in this manual provides statements of the Minnesota State Board of Education's values, philosophy, mission, and learner goals, and explains the two purposes for which they were designed: (1) to provide a model for use by communities and school staff; and (2) to serve as a hierarchy for use by Department of Education staff and educators in the development of learner outcomes. The second chapter introduces the goals of educational media and technology in school library media programs and provides a rationale for teaching media and technology skills. The desired learner outcomes are described in three broad areas: accessing information, processing information, and communicating information. A listing of model learner outcomes to be achieved by students by the time they graduate is provided in the third chapter together with objectives designed to help students reach the goals in the three previously listed areas. Desired outcomes are classified according to the cognitive levels of knowledge, application, and integration, as well as affective development, psychomotor development, international/global concept development, and multicultural/gender fair concepts. Chapter four discusses the development of learner outcomes and their integration into the curriculum. Four curriculum development forms with instructions and five samples of media outcomes forms are presented as tools that media specialists may use to organize instruction. An outline of model learner outcomes for media and technology in elementary schools is appended and a glossary and 14-item annotated bibliography are provided. (DB)

IR

MODEL LEARNER OUTCOMES FOR EDUCATIONAL MEDIA AND TECHNOLOGY

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED336070

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Cynthia Hanson

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Minnesota Department of Education

BEST COPY AVAILABLE

© 1989 Minnesota Department of Education

Permission is granted to Minnesota school districts to duplicate this document for non-profit, educational use. All others require written permission from the Minnesota Department of Education. Inquiries should be referenced to: Gilbert Valdez, Ph. D., Manager of Instructional Design, 684 Capitol Square Building, 550 Cedar Street, St. Paul, MN 55101.

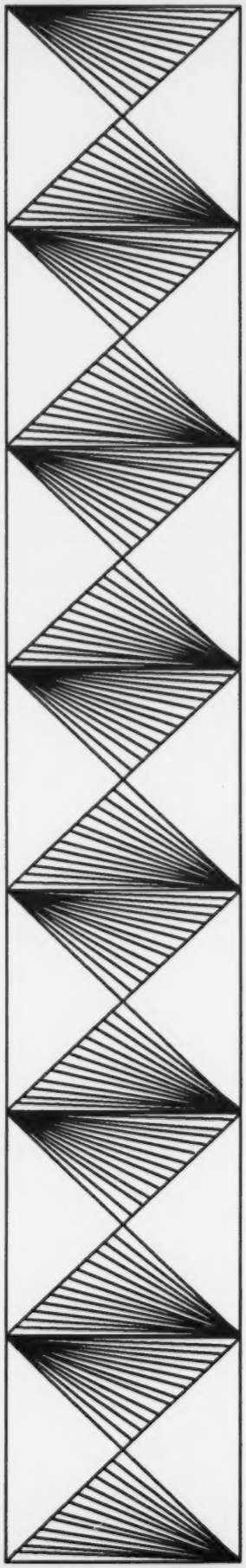
This publication is available from: The ***Minnesota Curriculum Services Center*** which is supported by the State of Minnesota Department of Education. The MCSC does not discriminate on the basis of race, color, creed, religion, sex, national origin, marital status, status with regard to public assistance or disability.

Minnesota Curriculum Services Center
3554 White Bear Ave. • White Bear Lake • MN 55110
(612) 770-3943 • 1-800-652-9024

E 730

2574
8891000

BEST COPY AVAILABLE



MODEL LEARNER OUTCOMES FOR EDUCATIONAL MEDIA AND TECHNOLOGY

Edited by Mary Dalbotten, Media Education Specialist

September, 1986

Minnesota Department of Education
Instructional Design Section

STATE OF MINNESOTA
DEPARTMENT OF EDUCATION

Mary Dalbotten, Media Education Specialist

Dr. Ruth E. Randall	Commissioner of Education
Dr. Dwight Lindbloom	Assistant Commissioner
Dr. Gilbert Valdez	Manager Instructional Design Section

STATE BOARD OF EDUCATION

James Hoese	President
Marjorie Johnson	Vice President (Seventh District)
Lloyd Swenson	First District
Eunice Johnson	Second District
Thomas Lindquist	Third District
Jewell Lewis	Fourth District
Douglas Wallace	Fifth District
Erling Johnson	Sixth District
Ruth Myers	Eighth District

COMMITTEE MEMBERS

This document was developed with the assistance of very capable people from school districts of varying size throughout Minnesota. They have demonstrated skill and knowledge in the areas of media and technology and have been generous in sharing their talents.

Mary Alice Anderson
7-9 Media Generalist
Winona Public Schools

Joel Brenckman
7-9 Media Generalist
Willmar Public Schools

Jane Cabaya
K-12 Media Generalist
Kasson-Mantorville Public Schools

Sandra Clarke
K-3 Media Generalist
Minneapolis Public Schools

Kathy Ehlers
K-6 Media Generalist
Anoka Public Schools

Kris Gardinier
8-9 Media Generalist
Brainerd Public Schools

Candy Hansmeyer
K-6 Media Generalist
Osseo Public Schools

Orvis Haugen
K-12 Media Generalist
Grygla Public Schools

Curt Hokanson
K-12 Media Generalist
Jasper Public Schools

Thea Holtan
K-6 Media Generalist
Bloomington Public Schools

Barbara Janson
10-12 Media Generalist
Duluth Public Schools

Steve Koyama
Learning Resources
St. Cloud State University

Sue Krueger
K-3 Media Generalist
Minneapolis Public Schools

Grace Kurtz
K-8 Media Generalist
St. Paul Public Schools

Francine Laske
District Media Supervisor
Moorhead Public Schools

Janet Palmer
K-12 Instructional Technology Coordinator
Forest Lake Public Schools

Marilyn Setzler
K-6 Media Generalist
Robbinsdale Public Schools

Dennis Thompson
7-9 Media Generalist
Faribault Public Schools

Lynn Cherrier
Specialist, Media and Technology
Minnesota Department of Education

Mary S. Dalbotten
Specialist, Media and Technology
Minnesota Department of Education

Wayne Erickson
Manager, Curriculum Services
Minnesota Department of Education

Cynthia Kelly
Specialist, Equal Educational Opportunities
Minnesota Department of Education

Robert H. Miller
Supervisor, Media and Technology
Minnesota Department of Education

Gilbert Valdez
Manager, Instructional Design
Minnesota Department of Education

Joan Wallin
Specialist, Instructional Design
Minnesota Department of Education

TABLE OF CONTENTS

Chapter I	Minnesota State Board of Education Values, Philosophy, Mission and Goals	1
Chapter II	Introduction and Goals of Educational Media and Technology	13
Chapter III	Model Learner Outcomes in Educational Media and Technology	15
Chapter IV	Developing and Transposing Learner Outcomes into Curriculum	29
Appendix 1	Elementary Model Learner Outcomes in Educational Media and Technology	61
Glossary	.....	71
Bibliography	.....	73

CHAPTER I

Minnesota State Board of Education Values, Philosophy, Mission and Goals

Public education in Minnesota has a strong heritage of public involvement in the operation of its schools. At no time in history has that involvement been more important. The American society is in the midst of a multitude of social changes including two that dramatically effect schools. They are increased demands for accountability of all social institutions and the all-encompassing movement from an industrial based economy to an economy based on information and service. Changes of the latter type occur only once every several generations and have profound effects on individuals. Public education can mitigate some of the negative impact of such changes on individuals, by openly involving citizens in procedures that result in decisions regarding the future of public education. Such involvement is essential to accountability and to empowering the citizens to be a part of deciding their future.

The Minnesota Department of Education document titled, **Goal and Outcome Specification Process**, suggests a set of procedures for appropriate involvement of the public. These procedures include public participation on the development of statements of values, philosophy, mission, and learner goals. These sets of statements are a hierarchy of increasingly specific concepts ranging from values, the most general, to learner goals, the most specific, that give form and direction to public education. Given this hierarchy, staff, skilled in subject matter and the profession of teaching, can develop very specific expectations, learner outcomes, for each subject area.

The following sets of statements were adopted by either the Minnesota State Board of Education or the Minnesota State Legislature for two purposes. First they provide a model for use by communities and school staff as they strive to improve the learning experiences they provide for residents. Second, they are the hierarchy used by Department staff and teams of educators as they develop model learner outcomes for each subject area. Only the, **Mission Statement for Public Education**, adopted by the legislature gives explicit direction to public schools. All other parts of this document are models, suggestions for the consideration of residents and professionals in each school district.

THE MINNESOTA STATE BOARD OF EDUCATION VALUES THE FOLLOWING HUMAN ATTRIBUTES AS PREEMINENT FOR THE CITIZENS OF THE STATE OF MINNESOTA.

COMPASSION - a condition in individuals whereby each is sensitive to the conditions affecting the lives of others and each has the commitment to assist others when appropriate and possible.

COMPETENCE - a condition in individuals whereby each attains levels of knowledge, skill, and affect commensurate with his or her potential.

COOPERATIVENESS - a condition in individuals whereby each interacts with others in a manner that mutually benefits all participants in the interaction.

CREATIVITY - a condition in individuals whereby each acts or expresses self in new, improved, or unique ways.

CRITICAL THINKING - a condition in individuals whereby each is able to judge the potential for a proposal or activity to achieve its stated purpose.

HONESTY - a condition in individuals whereby each is fair and straightforward in the conduct of human interactions.

LEARNING - a condition in individuals whereby each continually strives to increase personal levels of fulfillment and competence in an expanding array of human endeavors.

PROBLEM SOLVING - a condition in individuals whereby each has the ability to identify, frame, and propose new, improved, or unique solutions to existing and emerging problems.

RESPONSIBILITY - a condition in individuals whereby each strives to fulfill the obligations of self-sufficiency and active commitment to the common good.

SELF-ACCEPTANCE - a condition in individuals whereby each has a positive self-image, through assertion of rights, holding personal physical and emotional well-being as an ideal, accepting personal talents with humility and personal limitations with the resolve to improve where possible and accept where necessary.

EDUCATION SYSTEM VALUES

THE MINNESOTA STATE BOARD OF EDUCATION VALUES THE FOLLOWING SYSTEMIC ATTRIBUTES AS PREEMINENT FOR ALL SCHOOLS IN THE PUBLIC EDUCATION SYSTEM.

ACCOUNTABILITY - a condition in every school whereby each is able to justify its use of public resources by effectively fulfilling its mission of student learning.

EFFECTIVENESS - a condition in every school whereby each accomplishes its mission in a time frame and at a performance level defined by students, parents, citizens of the community, and their representatives.

EFFICIENCY - a condition in every school whereby each accomplishes the highest possible level of excellence with available resources.

EQUITABILITY - a condition in each school whereby every student attending the school is provided with appropriately designed and individually determined opportunities to achieve the highest level of excellence his or her potential allows.

EXCELLENCE - a condition in every school whereby the highest possible standards are accepted as the norm for performance for all students.

RESPONSIBILITY - a condition in each school whereby each accepts and acts on the belief that: the parent(s) has primary responsibility for raising and educating the child; the community is responsible for assisting parents in areas of needs; and the school, as a part of the community, is responsible for providing learning experiences.

RESPONSIVENESS - a condition in every school whereby diversity of personal and group needs and aspirations are expected, accepted, encouraged, and routinely addressed.

WHOLENESS - a condition in every school whereby each gives necessary and appropriate consideration to the potential career needs and social, emotional, and physical growth of each student as it designs and implements educational programs.

MINNESOTA STATE BOARD OF EDUCATION

PHILOSOPHY
FOR
LEARNING IN THE PUBLIC SCHOOLS

THE STATE BOARD OF EDUCATION BELIEVES THAT:

. . . Human beings are becoming globally interdependent while maintaining extremes in diversity of behaviors, sophistication, and values. Advancement requires people who are at the same time honest, responsible, compassionate, and cooperative. Schools must model those characteristics as they provide opportunities for individuals to develop those traits.

. . . Each human being must understand and accept self before there can be any expectation that he or she will become a self-sufficient contributing member of society. Schools must implement systems and procedures and must conduct human interactions in a manner that encourages, enhances, and assists in the development of a positive self-image by every individual. Schools must ensure that their systems and procedures and their conduct of human interactions do not inhibit the development of a positive self-image by every individual.

. . . Life in our world today is becoming increasingly complex. Population growth, diminution of natural resources, pollution of the environment, and technological advances in communications and travel have brought the human race closer together, increased the amount of human interaction, and brought on problems never before faced by humankind. Individuals living within this situation must be increasingly competent in an ever-widening range of activities and must be progressively creative in solving technological and human problems. Schools must ensure ongoing opportunities for individuals to develop and improve competence in all areas of human endeavor, model and enhance creativity, and provide experiences in creative problem solving for students. Schools must ensure that every student is provided an appropriately designed opportunity to develop the basic learning tools of communications and computation.

MINNESOTA STATE BOARD OF EDUCATION

PHILOSOPHY
FOR
THE PUBLIC EDUCATION SYSTEM

THE STATE BOARD OF EDUCATION BELIEVES THAT:

. . . A democratic society has a need for an educated citizenry and a responsibility to meet that need. The public schools are entrusted with fulfilling that need. To carry out its mission, schools expend a significant portion of the state's public resources. This public trust assumes a self-evident responsibility for utilizing resources efficiently, performing as effectively as contemporary wisdom allows, and accounting for the excellence of its results.

. . . The citizens of Minnesota are extremely diverse in terms of heritage and dreams for the future. Concurrent with this diversity is the democratic societal need to have a total citizenry educated to a level that provides the means for communication, productivity, and assuring the maintenance of a free society. To meet the public need, the public schools must assure high standards for responsiveness and equity of access. To meet the diverse needs of individuals, responsibility for planning, implementing, and maintaining specific learning opportunities must be vested as close to the individual as efficient use of public funds allows.

. . . All humans can learn and each exists and enters school as a whole person, indivisable into such conceptual components as intellectual, social, emotional, physical, and future career aspirations. Each is more than the sum of the parts. These are expedients, oversimplified arbitrary divisions of human attributes that are interrelated and interreactive within each person. Each community has a shared responsibility with the parents for meeting the needs of each child. Each school must implement programs that stress the intellectual development of each student, and give full consideration and necessary attention to other attributes essential to learning and adulthood in a free democratic society.

MISSION FOR PUBLIC EDUCATION

As adopted by the Minnesota Legislative Commission on Public Education and enacted into law, Chapter 40, Laws of 1985

The purpose of public education is to help individuals acquire knowledge, skills, and positive attitudes toward self and others that will enable them to solve problems, think creatively, continue learning, and develop maximum potential for leading productive, fulfilling lives in a complex and changing society.

MINNESOTA STATE BOARD OF EDUCATION MISSION

The purpose of Minnesota State Board of Education is to provide the vision and leadership essential to an increasingly equitable and effective system of public education as defined by the Minnesota State Legislature.

MISSION STATEMENT FOR THE MINNESOTA DEPARTMENT OF EDUCATION

The Minnesota Department of Education provides leadership, service, and regulation to maintain and improve an equitable, uniform and quality system of public education for all learners.

The Department provides leadership as an advocate for education by defining quality education and by seeking the resources necessary to meet the needs of all learners.

The Department provides service through informational and technical assistance that will improve the productivity and performance of students and staff, and provide opportunities for the development of the potential of all learners.

The Department regulates education by maintaining, interpreting, and enforcing Minnesota State Board of Education rules and state and federal laws.

MINNESOTA STATE BOARD OF EDUCATION

LEARNER GOALS

A. In order to effectively participate in formal learning experiences, each student will develop the skills of:

1. reading to gather data, information, perspective, understanding, and to utilize reading as a leisure time activity;

2. writing to explain, describe, and express a point of view and feelings;

3. listening to gather data, information, perspective, and understanding;

4. speaking to explain, describe, express a point of view and feelings, and to debate an issue;

5. computing to apply arithmetic functions to situations;

6. using technological tools to enhance learning opportunities.

B. In order to lead a productive and fulfilling life, each student will accumulate knowledge and develop the understanding, application skills, and affect essential to:

1. participation in lifelong learning to gain additional information and skills;

2. living within local, state, national, and world political and social structures;

3. examining personal beliefs and values and the relationship between those and behavior;

4. making informed ethical and moral decisions;

5. citizenship;

6. stewardship of the land, natural resources, and environment;

7. acting on the impact of natural phenomena on human life;

8. acting on the impact of technological advances on human life;

9. expression of self and understanding of others through creative and aesthetic endeavors;

10. developing an understanding of career options and general education requirements for each;

11. developing an understanding of world and national economic conditions as a base for making informed decisions on consumer products, occupations, and career needs and resources;

12. selecting or preparing for a series of occupations that will be personally satisfying and suitable to one's skills and interests;

13. management of personal affairs.

C. In order to resolve issues and meet needs creatively, each student will develop the thinking and decision-making skills of:

1. comparing, differentiating, and relating information and facts about which each has the ability to understand and apply knowledge;

2. combining various facts, situations, and theories to formulate new and original hypotheses or to develop new solutions;

3. critiquing and making judgments about materials, conditions, theories, and solutions;

4. generating and valuing creative alternatives.

D. In order to value, understand, and act based on an acceptance of the interdependence of humankind, each student will develop the knowledge, skills, and affect essential to:

1. seeking interactions and feeling comfortable with others who are different in race, religion, social level, or personal attributes, as well as those who are similar in these characteristics;

2. acting with an understanding of the basic interdependence of the biological and physical resources of the environment;

3. acting with an understanding of the interrelationships among complex organizations and agencies in modern society;

4. assuming responsibility for dependent persons of all ages in a manner consistent with both their growth and development needs and the needs of society.

E. In order to value, understand, and act based on knowledge of the diversity of humankind, each student will develop the knowledge, skills, and affect essential to:

1. basing actions and decisions on the knowledge that individuals differ and are similar in many ways;

2. basing actions and decisions on the knowledge that values and behaviors are learned and differ from one social group to another;

3. basing actions and decisions on the understanding of life styles or behaviors within the context of the value system of the societies in which they were learned;

4. withholding judgment of another's actions until after trying to understand the personal and social context of that action.

F. In order to address the problems of humankind through group effort, each student will develop the knowledge, skills, and affect essential to:

1. basing actions and decisions on the understanding that as individuals move from one society to another, they can learn life styles and can learn to behave appropriately in different societal contexts;

2. acting on the belief that human behavior is influenced by many factors and is best understood in terms of the relevant person context in which it occurred;

3. acting in accordance with a basic ethical framework incorporating those values contributing to group living, such as honesty, fairness, compassion, and integrity;

4. working in groups to achieve mutual goals;

5. providing leadership in resolving personal and societal issues.

G. In order to effectively resolve conflicts with and among others, each student will develop the knowledge, skills, and affect essential to:

1. assuming responsibility to form productive and satisfying relations with others based on respect, trust, cooperation, consideration, and caring;

2. acting on the belief that each individual has value as a human being and should be respected as a worthwhile person in one's own right;

3. dealing with conflict in a constructive manner.

H. In order to act on contemporary events and issues with a perspective of their historical origins, each student will develop the knowledge, skills, and affect essential to:

1. understanding the origins, interrelationships, and effects of beliefs, values, and behavior patterns in world cultures;

2. understanding one's culture and historical heritages, the literary, aesthetic, and scientific traditions of the past, and familiarity with the ideas that have inspired and influenced humankind;

3. understanding the manner in which heritages and traditions of the past influence the direction and values of society;

4. exploring one or more world language and culture.

I. In order to develop a positive attitude toward self, each student will develop the knowledge, skills, and affect essential to:

1. developing the self-confidence needed for confronting one's self;

2. developing feelings of positive self-worth, security, and self-assurance;

3. living with one's strengths and weaknesses;

4. acquiring knowledge of one's own body and a positive attitude toward one's own physical appearance;

5. adopting the idea of self-realization based on the concept that there is more than one way of being human and that efforts to develop a better self contribute to the development of a better society;

6. understanding that self-concept is acquired in interaction with other people.

7. developing habits, such as pride in good workmanship;

8. adopting a positive attitude toward work, including an acceptance of the necessity of making a living and an appreciation of the social value and dignity of work.

J. In order to set personal goals, each student will develop the knowledge, skills, and affect essential to:

1. selecting personal learning goals;

2. making decisions with purpose;

3. planning and organizing the environment in order to realize one's goals;

4. accepting responsibility for, and the consequences of, one's own decisions;

5. controlling or releasing emotions according to one's values;

6. working now for goals to be realized in the future;

7. selecting viable alternatives for actions in changing circumstances.

K. In order to cope with change, each student will develop the knowledge, skills, and affect essential to:

1. initiating appropriate change while recognizing the value of existing structure and concepts;

2. tolerating ambiguity;

3. basing actions on an understanding that coping with change is a continuous process throughout life;

4. developing an understanding and acceptance of the changing world of work and the potential need to change careers several times throughout one's life;

5. using career information and ongoing counseling services for making informed and satisfying vocational choices.

L. In order to lead a healthy, fulfilling life, each student will develop the knowledge, skills, and affect essential to:

1. assuming responsibility for one's own health and safety by establishing a daily regime of health behaviors that will contribute to a positive life style and an improved quality of life;

2. making informed decisions in regard to the selection and utilization of health products and services;

3. making decisions regarding life styles that promote healthful family living;

4. being an advocate for adequate and effective public health measures that will protect the individual, family, community, and the environment;

5. an appreciation of physical and motor fitness and understanding of its relationship to health maintenance;

6. function in the continuum of play-skill activities which include understanding, cooperation, accepting rules, controlling emotions, following group process, and acquiring self-satisfaction;

7. maintenance of the physical conditioning to participate in a variety of individual, dual, and group sports/activities and to participate in outdoor activities.

CHAPTER II

Introduction and Goals of Educational Media and Technology

The purposes of this chapter are to provide a rationale for teaching media and technology skills, and to relate these skills to the goals of the Minnesota State Board of Education.

The goal of the school library/media program is to ensure that each child acquires skills necessary to become a self-reliant, lifelong learner.

The school library/media skills program is an integral part of the instructional process. Good library/media programs are designed to teach the student skills in finding, interpreting and applying information to help the learner function effectively as an individual and in groups. Library/media programs are also designed to instill in young people an appreciation for literature, film, and other forms of media.

Educators are increasingly aware that schools must attempt to provide instruction relative to the varying needs, learning styles, ability levels, and cultural backgrounds of today's students. These students come to school with diverse social, intellectual, psychological, and emotional experiences. In addition, they are exposed daily to highly stimulating and rapidly changing technology outside the school setting. If students are to function successfully in a complex society, they must acquire skills and knowledge to become independent, self-reliant learners. Within the school, the library/media program is a major force which helps the student develop these essential skills. The school's media center should serve as an extension of the classroom--a laboratory for applying those skills that can be applied to information needs throughout the student's life. In addition, experiences with literature, film, and other types of media help in the understanding of differences among people, and also help students gain insight into their own problems.

The learner outcomes were developed in three broad stages of learning skills in educational media and technology as follows:

Accessing Information: Learners will become familiar with and understand the potential of the wide variety of information sources and personnel available in their schools, communities, state, nation, and global society. Learners will be able to locate and use information from these sources. Learners will actively pursue information according to their particular academic and individual needs. The learner will understand that there are a variety of formats and materials available to accommodate all ability levels and learning styles.

Processing Information: The learner will comprehend and apply concepts presented in media. The learner will apply critical reading, viewing and listening skills in resource selection and in analyzing available resources. The learner will apply thinking processes in organizing, analyzing, and interpreting information and developing evaluative skills in order to become an intelligent consumer of information for the purpose of solving problems and making decisions.

Communicating Information: Learners will select the most appropriate technology to communicate their messages. The learner will design, produce, and present information in a variety of formats appropriate to the message being

communicated. The learners will use multicultural, gender-fair concepts in the design of the production. Learner will evaluate the presentation of information produced by themselves and others.

These three stages of learning relate to all of the Minnesota State Board of Education Learner Goals, but particularly to subgoals 1, 2, 3, 4, and 6 of Goal A which refer to reading, writing, speaking, and listening skills as well as using technological tools to enhance learning opportunities. We would combine subgoals 1 and 3, subgoals 2 and 4 in the following way:

1. reading, listening, and viewing to gather information, perspective, and understanding, and provide leisure activities.

2. writing, speaking, and producing media to explain, describe, analyze, and synthesize information gleaned from other sources and/or to express points of view, perspectives, understandings and feelings.

Note that in subgoal 1, we added viewing skills which we feel are as essential as reading, listening, writing, and speaking. In subgoal 2 we added the production of media which supplements writing and speaking in communication.

The accomplishment of many of the other Minnesota State Board of Education goals depend on these essential skills. In addition, the skills learned and practiced in the library/media center contribute to the development of lifelong learning skills, thinking, and decision-making skills, conflict-resolution skills, a positive attitude toward self, and the ability to cope with change, especially in the area of new technologies.

CHAPTER III

LEARNER OUTCOMES FOR EDUCATIONAL MEDIA AND TECHNOLOGY

The purpose of Chapter III is to provide a listing of outcomes to be achieved by students by the time they graduate. Individuals interested in outcomes for elementary students should see Appendix 1. Each outcome is keyed to the Minnesota Board of Education Learner goals in the first column. The outcomes are classified according to the cognitive levels of knowledge, application and integration. They are also classified according to affective development, psychomotor development, international/global concept development, and multicultural/gender fair concepts. These terms are defined in the glossary. In future versions of this document, the learner outcomes will be keyed to test items or evaluation procedures in the assessment columns.

State Board of Education Learner Goals A.1 - L.7

Classification
K = Knowing
Ap = Applying
I = Integrating (Analysis, Synthesis, Evaluation)

P = Psychomotor
Af = Affective
MG = Multicultural Gender Fair
IG = International/ Global Concept Development

Assessment

State Board of Education Learner Goals	Learner Outcomes	Classification	Assessment

ACCESSING INFORMATION Learners will become familiar with and understand the potential of the wide variety of information sources and personnel available in their schools, communities, state, nation, and global society. Learners will locate and use information from these sources. Learners will actively pursue information according to their particular academic and individual needs. The learner will understand that there are a variety of formats and materials to accommodate all ability levels and learning styles.

I. LOCATION, PHYSICAL ARRANGEMENT AND PERSONNEL

A, D.3

A. The learner will identify and locate the information systems and resources appropriate to their needs. — K, IG

1. school library/media center
2. public library, art center, historical society, special libraries, television, radio
3. cable systems, satellite technology, local and global computer networks and databases

A, B.1

B. The learner will locate the different storage areas within an information system and understand their function and organization. — Ap

e.g., fiction
non-fiction
reference
periodicals
newspapers
microfiche
computers
filmstrips
records
films
videotape
easy/picture book
professional materials
equipment

A, B.1

C. The learner will differentiate among and choose the appropriate activity areas in which to complete media tasks assigned from the classroom or to satisfy personal needs.

e.g., reading
researching
listening and viewing
producing

BEST COPY AVAILABLE

State Board of Education Learner Goals A.1 - L.7	Classification K = Knowing Ap = Applying I = Integrating (Analysis, Synthesis, Evaluation)	 P = Psychomotor Af = Affective MG = Multicultural Gender Fair IG = International/ Global Concept Development	Assessment

State Board of Education Learner Goals	Learner Outcomes	Classification	Assessment
	hearing stories circulating materials and equipment conferring in small or large groups computing teleconferencing		
D, E	D. The learner will demonstrate an understanding of the roles and expertise of the people working in information systems.	K, Ap	
D, E	E. The learner will recognize the limits/dimensions of available information/materials at a specific locality in comparison to the total information that is accessible via networks, etc.	K	
	II. POLICIES AND PROCEDURES		
B.5	A. Learners will understand and practice the circulation procedures for print, nonprint and equipment, in whatever information system they are using.	K, Ap	
B.5	B. The learner will identify and demonstrate actions which help the operation of the program so that the whole group of users will benefit.	K, Ap, Af	
B.6	C. The learner will identify and demonstrate ways of caring for media, equipment, and facilities so that life span is extended and upkeep is minimized.	K, Ap, Af	
B.5	D. The learner will generalize that when media centers provide for many users, everyone must operate under established policy and operating procedures.	I	
	III. SELECTION AND USE		
B.1	A. The learner will understand that there are two major ways to organize materials - alphabetical and numerical - in information systems and will understand why materials are housed in particular locations. 1. alphabetic - author, title, subject 2. numeric - Dewey Decimal Classification, Library of Congress, series, sequential numbers	K	
B.1, D.3	B. The learner will identify the purpose and arrangement of a wide variety of indexing tools and cataloging systems and use them to locate information. 1. book, card, microform, or electronic catalogs, periodical indexes, telephone books, pamphlet and newspaper indexes, etc. 2. electronic databases	K, Ap	

State Board of Education Learner Goals A.1 - L.7	Classification K = Knowing Ap = Applying I = Integrating (Analysis, Synthesis, Evaluation) P = Psychomotor Af = Affective MG = Multicultural Gender Fair IG = International/ Global Concept Development	Assessment

State Board of Education Learner Goals	Learner Outcomes	Classification	Assessment
B.1	C. The learner will generalize that sources usually offer a system of helps, such as indexes and cataloging systems, to the user who seeks both specific and general information. Further, learners conclude that individuals should use a systematic approach to get information that is relevant to a particular topic. e.g., indexes tables of contents user's instructions legends boldface and italics graphic clues cross references thesauri		
A.6, C	D. Learners will recognize and locate the various media forms and know which form is appropriate to meet their individual needs. The learner will know and use the delivery system that is appropriate to each form. The learner will operate the equipment associated with the various delivery systems. 1. media forms - print, video, audio, computer disk, microform, 2. delivery systems - audio, visual, electronic, projection, telecommunication, print, robotic	K, Ap, P	
A.6	E. The learner will differentiate among equipment used for retrieving information, for building skills, for processing information, for producing media, and for communicating current messages. The learner will demonstrate the understanding that all equipment serves intended purposes and that the user determines which medium best fits a given assignment or personal need. e.g., RETRIEVING tape player phonograph viewer/projector computer/monitor VCR/monitor headsets SKILL BUILDING computer calculator timed reader PROCESSING calculator computer PRODUCING MEDIA camera/tripod/copystand dry mount press audio tape decks computer/printer video editor graphics tablet video camera		

State Board of Education Learner Goals A.1 - L.7	Classification K = Knowing Ap = Applying I = Integrating (Analysis, Synthesis, Evaluation)	P = Psychomotor Af = Affective MG = Multicultural Gender Fair IG = International/ Global Concept Development	Assessment

State Board of Education Learner Goals	Learner Outcomes	Classification	Assessment
	MESSAGE RELAYING cable satellite television telephone teletype		
A.	F. The learner will identify the basic components of print, audiovisual, and electronic materials and systems. a. print - author/editor, title, illustrator, publisher, copyright date, title page, table of contents, bibliographic citations, index, etc. b. audiovisual/electronic - title, credits, menu, user's instructions, etc.	K, Ap	
A.	G. The learner will use the basic components of media and distinguish which are relevant when assignments require up-to-date, footnoted, and/or bibliographically listed sources.	Ap, I	
B.4	H. The learner will understand the concept of copyright and demonstrate respect for ownership.	K, Af	
A.1	I. The learner will recognize, use and demonstrate preferences for particular kinds and/or forms of literature including multicultural, gender-fair materials. e.g., autobiography biography comedy easy/picture book fiction mystery fiction detective fiction historical fiction romantic fiction science fiction Western fiction social/personal fiction mythology folktale/fairy tale/legend interactive fiction drama short story novella novel poem satire parody critical essay documentary editorial news story feature story travelogue	K, Ap, I, MG, IG	

State Board of Education Learner Goals A.1 - L.7	Classification K = Knowing Ap = Applying I = Integrating (Analysis, Synthesis, Evaluation)	P = Psychomotor Af = Affective MG = Multicultural Gender Fair IG = International/ Global Concept Development	Assessment

State Board of Education Learner Goals	Learner Outcomes	Classification	Assessment
A, C, D	J. The learner will select materials according to appropriate criteria, such as their being relevant, accurate, authoritative, current, multicultural, gender fair, and of appropriate quality, level of difficulty, and format.	K, Ap, MG	

State Board of Education Learner Goals A.1 - L.7	Classification K = Knowing Ap = Applying I = Integrating (Analysis, Synthesis, Evaluation)	P = Psychomotor Af = Affective MG = Multicultural Gender Fair IG = International/ Global Concept Development	Assessment

State Board of Education Learner Goals	Learner Outcomes	Classification	Assessment

PROCESSING INFORMATION: The learner will comprehend and apply concepts presented in media. The learner will apply critical reading, viewing, and listening skills in resource selection and in analyzing available resources. The learner will apply thinking processes in organizing, analyzing, and interpreting information and developing evaluative skills in order to become an intelligent consumer of information for the purpose of solving problems and making decisions.

I. SELECTION AND USE

A

A. Learners will analyze their information needs in terms of questions to be explored. — I

A

B. The learner will assess the value of various types of resources for data gathering. These resources may be indexes to information, communication tools, community information resources, and/or technological information systems such as online databanks. — I

A

C. The learner will make choices about the data based on the content, format, timeliness, literary style and type/genre of the resources available. — I

II. MEDIA LITERACY

A, B, C

A. The learner will understand and evaluate the process involved in creating media messages. — K, Ap, I

1. The learner will analyze a media production to determine the relationships of the components to the purpose of the overall work (e.g.,, analyze a record album to determine the relationship of the musical score, lyrics, and graphics to the purpose of the overall work). — I
2. The learner will compare and contrast the methods used in making a book, a film, videotape, radio show, newspaper, and magazine. — I
3. The learner will interpret the effects of the unique properties of the medium on the message.

B.9, C

B. The learner will recognize, interpret, and create visual images.

1. The learner will identify, interpret, analyze and evaluate the influence of visual communication on language, thought, and experience. — K, Ap, I
2. The learner will recognize the effects of distortion, stereotyping, propaganda, and violence in visual media. — K
3. The learner will recognize and appreciate the aesthetics of visual images and of image creation. — K, Af
4. The learner will create mental images by inference from non-visual messages and will communicate to others through the creation of visual images. — Ap, I

State Board of Education Learner Goals A.1 - L.7	Classification K = Knowing Ap = Applying I = Integrating (Analysis, Synthesis, Evaluation)	P = Psychomotor Af = Affective MG = Multicultural Gender Fair IG = International/ Global Concept Development	Assessment

State Board of Education Learner Goals	Learner Outcomes	Classification	Assessment
A, C	C. The learner will recognize and interpret media messages, including the persuasive methods inherent in some media messages.	K, Ap, I	
	1. The learner will decode visual and verbal images as well as literary images.	K	
	2. The learner will determine the main idea, purpose, intent, and reliability of the message.	K, Ap	
	3. The learner will identify the reasons for presenting a promotional message and will determine how verbal and nonverbal persuasive language is used to play on human emotions and needs in an advertisement and a feature story.	K, Ap	
	4. The learner will analyze the way in which size, shape, color, camera angle, and focus influence the appeal in visual promotional messages.	I	
	5. The learner will use evaluative criteria such as relevance, accuracy, authority, and general quality, in making judgements about the message.	I	
	6. The learner will appreciate the importance of using analytical skills with media as it influences opinion.	Af	
C.1, C.3	D. The learner will know and assess the unique attributes of each medium in reporting the news.	K, Ap, I	
	1. The learner will recognize the selectivity of all media in news coverage.		
	2. The learner will analyze the presentations of an event in a variety of media using criteria such as: the length of presentations, the amounts and types of information provided, the scope of events, and their inferences.	I	
	3. The learner will recognize and make connections between a chain of events, how they are reported, and the resulting impact they have on the public.	K, Ap, I	
	a. The learner will determine events which link to each other in a chain of cause-effect relationships.		
	b. The learner will infer motives of varied media presentations about a chain of events.		
	c. The learner will predict long-range effects which the events could have on both a thinking and an unthinking public.		
	d. The learner will draw several conclusions about the cause-effect relationships between the media's reports and the public's responses.		
	e. The learner will form a generalization from conclusions about the impact of the media on the public.		
	4. The learner will exercise thinking skills to interpret the relationships between events and the reporting of those events by the media.		

BEST COPY AVAILABLE

State Board of Education Learner Goals A.1 - L.7	Classification K = Knowing Ap = Applying I = Integrating (Analysis, Synthesis, Evaluation)	P = Psychomotor Af = Affective MG = Multicultural Gender Fair IG = International/ Global Concept Development	Assessment

State Board of Education Learner Goals	Learner Outcomes	Classification	Assessment
	5. The learner will value the role of interpretive thinking skills in a society of expanding information and increasing media presentations.	Af	
B.8	F. The learner will recognize the impact of technology on daily life.	K, Ap	
	1. The learner will describe ways technology is used at home, at school and in the community.	K	
	2. The learner will acknowledge the various ethical and legal issues related to technology.	K	
	e.g., privacy and public access software/telecommunication piracy regulation/competition computer hacking sex equity poor/discrimination international information flow/national security		
	3. The learner will analyze the impact of technology on the use of time.	I	
	4. The learner will analyze the impact of technology today and make predictions about the future.	I	
A, C	**III. THINKING AND RESEARCH PROCESSES**		
C.3	A. The learner will evaluate the reliability and relevance of sources.	I	
	1. The learner will distinguish between relevant and irrelevant sources.	I	
	2. The learner will distinguish between reliable and unreliable sources.	I	
C	B. The learner will use reliable and relevant sources of information.	Ap	
	1. The learner will recognize the importance of using more than one source to obtain information.	K	
	2. The learner will develop questions appropriate for obtaining information from sources.	Ap	
	3. The learner will record observations and information obtained from sources.	Ap	
	4. The learner will identify points of agreement and disagreement among the sources.	K	
	5. The learner will evaluate the quality of the available information.	I	
C	C. The learner will organize, interpret, analyze, and synthesize information obtained from various sources.	Ap, I	
	1. The learner will identify central elements in information.	K	

State Board of Education Learner Goals A.1 - L.7	Classification K = Knowing Ap = Applying I = Integrating (Analysis, Synthesis, Evaluation)	P = Psychomotor Af = Affective MG = Multicultural Gender Fair IG = International/ Global Concept Development	Assessment

State Board of Education Learner Goals	Learner Outcomes	Classification	Assessment
	2. The learner will classify information through such techniques as grouping and labeling.	I	
	3. The learner will distinguish statements of fact from statements of opinion.	I	
	4. The learner will distinguish statements of inference from statements of fact.	I	
	5. The learner will identify stated opinions, biases and value judgments.	K	
	6. The learner will differentiate between points of view in primary and secondary sources.	I	
	7. The learner will recognize logical errors.	K	
	8. The learner will recognize inadequacies or omissions in information.	K	
	9. The learner will make inferences from data.	I	
	10. The learner will identify cause and effect relationships.	K	
	11. The learner will differentiate between causation and correlation.	I	
	12. The learner will recognize interrelationships among concepts.	K	
	13. The learner will identify stated and unstated assumptions.	K	
	14. The learner will summarize information.	K	
C	D. The learner will use summarized information for various purposes.	A	
	1. The learner will test hypotheses.	I	
	2. The learner will draw conclusions.	I	
	3. The learner will offer solutions to problems.	I	
	4. The learner will clarify issues.	I	
	5. The learner will make predictions.	I	
A.2, C, I.2, I.7	E. The learner will demonstrate ability to use the research process.	Ap	
	1. The learner will identify the subject to be researched.	K	
	2. The learner will select sources about the subject.	Ap	
	3. The learner will choose key ideas from the sources.	Ap	
	4. The learner will infer cause-effect relationships among the information.	I	
	5. The learner will relate information to knowledge and/or experiences.	A	
	6. The learner will relate information to examples.	A	
	7. The learner will extend concepts with definitions.	A	
	8. The learner will use several other identifying nouns to use in reference to the subject.	A	
	9. The learner will organize key ideas into areas based either on likenesses or cause-effect relationships.	Ap	
	10. The learner will name or label each categorical area.	I	
	11. The learner will organize these categories into a topic outline.	Ap	

State Board of Education Learner Goals A.1 - L.7	Classification K = Knowing Ap = Applying I = Integrating (Analysis, Synthesis, Evaluation)	 P = Psychomotor Af = Affective MG = Multicultural Gender Fair IG = International/ Global Concept Development	Assessment

State Board of Education Learner Goals	Learner Outcomes	Classification	Assessment
	12. The learner will compose a topic introductory paragraph which reflects the outline.	I	
	13. The learner will develop a topic sentence for each topic category in the outline.	I	
	14. The learner will subdivide notes into subtopics and label them.	Ap, I, P	
	15. The learner will organize these notes in a sequence of logical order.	Ap, I, P	
	16. The learner will prepare a report in written, oral and/or audiovisual form.	K, Ap, I, P, Af, MG, IG	

State Board of Education Learner Goals A.1 - L.7	Classification K = Knowing Ap = Applying I = Integrating (Analysis, Synthesis, Evaluation)	P = Psychomotor Af = Affective MG = Multicultural Gender Fair IG = International/ Global Concept Development	Assessment

State Board of Education Learner Goals	Learner Outcomes	Classification	Assessment

COMMUNICATING INFORMATION Learners will select the most appropriate technology to communicate their messages. The learner will design, produce, and present information in a variety of formats appropriate to the message being communicated. The learner will use multicultural, gender-fair concepts in the design of the production. The learners will evaluate the presentation of information produced by themselves and others.

I. SELECTION OF MEDIA FORMATS FOR COMMUNICATION

A, J.2

A. The learner will identify, select and use materials including those that are multicultural, gender fair, and appropriate to the information being communicated and to the intended audience's maturity and ability level. — K, Ap, I, MG, IG

1. Print - Books, periodicals, photographs, maps, transparencies, computer printouts
2. Audiovisual - cassette tape, record, film, slides, videotape or disk, filmstrip, computer programs

A.2, A.6

B. The learner will identify, select and use equipment properly for reporting and presenting purposes. — K, Ap, P

1. Audio

e.g., microphone
cassette recorders
record players
radio
telephone

2. Visual

e.g., overhead and opaque projector
8 and 16 mm film projector
videotape or disk player or projector
filmstrip projector
television (including cable and satellite)
slide projector
computer

3. Textual

e.g., word processing/microcomputer
duplication
overhead/transparency

II. PRODUCTION

A.6, B.9

A. The learner will recognize and use the equipment and materials necessary to create an original production. — K, P

State Board of Education Learner Goals A.1 - L.7	Classification K = Knowing Ap = Applying I = Integrating (Analysis, Synthesis, Evaluation)	P = Psychomotor Af = Affective MG = Multicultural Gender Fair IG = International/ Global Concept Development	Assessment

State Board of Education Learner Goals	Learner Outcomes	Classification	Assessment
	1. Equipment a. print - dry mount press, lettering equipment, transparency makers b. audio - microphone, cassette recorder, audio editing equipment, mixers c. visual - video and 35mm camera, editing and developing equipment, switchers, mixers, computers		
	2. Materials a. print - transparencies, charts, flannel boards, bulletin boards, computer programs and visuals b. audio - cassette tapes, records c. visual - videotapes or 8mm films, slides, filmstrips, live television d. other - puppets, dioramas		
A, B.9, I.2, I.7, J.3	B. The learner will create an orignal production that is effectively organized to convey the intended message, uses correct production techniques, is multicultural and gender-fair, is appropriate for the intended audience, and is aesthetic and creative in its design.	K, Ap, I, P, Af, MG	
F.4	C. The learner will work cooperatively with other students in creating a production by recognizing and completing specific tasks as a part of the team effort, using cross-cultural, cross-gender communications skills.	Ap, I, P, Af, MG	
	III. PRESENTATION		
C.1, J.3	A. The learner will select appropriate location and equipment for presenting the production.	Ap	
A.4, I, J.3	B. The learner will present media using correct techniques.	Ap, P	
	1. The learner will use proper delivery techniques such as: posture, voice level, eye contact, enunciation, microphone skills	Ap, P	
	2. The learner will demonstrate the correct use of format, such as: appropriate audio volume, viewing distance/angle, computer monitor size, avoiding too much information and keystone effect with transparencies, anticipating technical problems.	Ap, P	

26
BEST COPY AVAILABLE

State Board of Education Learner Goals A.1 - L.7	Classification K = Knowing Ap = Applying I = Integrating (Analysis, Synthesis, Evaluation)	P = Psychomotor Af = Affective MG = Multicultural Gender Fair IG = International/ Global Concept Development	Assessment

State Board of Education Learner Goals	Learner Outcomes	Classification	Assessment
	IV. EVALUATION		
C.3, I.3	A. Learners will evaluate the effectiveness of their communication efforts by using predetermined criteria.	I	
C.3, I.3	B. Learners will analyze the evaluation results to improve their communication.	I	

CHAPTER IV

Developing and Transposing Learner Outcomes into Curriculum

The "Learner Outcomes in Educational Media and Technology" document was developed to aid in the formulation of local media goals and objectives. These outcomes were formulated and categorized by a statewide team of elementary, secondary, district media personnel, and members of the Educational Media Unit and the Curriculum and Technology Section. They were further reviewed by other library/information/media professionals in school districts, colleges, and libraries.

The learner outcomes presented in this document are suggested model outcomes. Local variations in curriculum, student population, media collections and equipment, and organization of the media program and personnel will suggest numerous additions, modifications, and deletions. It is essential that the audiovisual and technological aspects, as well as the print aspects of the learner outcomes, be implemented.

Students learn and develop at varying rates depending on background, abilities, needs, and interests. Few skills can be acquired with one brief exposure. Therefore, continued reinforcement of skills previously introduced helps ensure the student's ability to be an independent user of all types of media resources.

INTEGRATION OF MEDIA SKILLS

Studies have demonstrated that the teaching of library/media skills is most successful when integrated into the curriculum instead of being taught as a separate, unrelated course. Since skills are best acquired through meaningful experiences rather than through arbitrarily scheduled or isolated exercises, instruction should be designed to meet the needs and interests generated from classroom activities and assignments.

Minnesota Rule 3500.1150, REQUIRED OFFERINGS FOR ELEMENTARY SCHOOLS, subpart 5. mandates the integration of media and technology skills. Minnesota Rule 3500.2110, REQUIRED CURRICULUM OFFERINGS FOR FOUR-YEAR SENIOR SECONDARY SCHOOLS, Subpart 3.B., states that "Information technology may be integrated with course content of other subject areas." The Information Technology Learner Outcomes also stress integration. The introduction states that the goals and outcomes "are intended to be interdisciplinary because students may learn with and about technology in a variety of subject areas."

It is the joint responsibility of teachers and media personnel, working together as an instructional team, to ensure that each student develops library/media skills. These experiences may occur in the media center, classroom, or other instructional areas. It is imperative that the teaching of media skills be integrated with relevant subject curricular topics rather than taught in isolation as a separate, unrelated curriculum. When teachers and media personnel share the responsibility for planning, teaching, and providing opportunities for students to practice, the integration of library media skills instruction into the curriculum will occur at the most appropriate time and will ensure retention by students.

The educational media learner outcomes interface with the learner outcomes in all curricular areas by providing the tools for research, and the knowledge of how to use these tools. The unavailability of equipment and materials may hamper the process in some situations; however, it is strongly recommended that a continual effort be made to expand and improve facilities, equipment, and materials. This is necessary to implement a strong educational media skills program (K-12) and to provide essential support to the total instructional program.

The following section is excerpted by permission of the authors from the book TEACHING LIBRARY MEDIA SKILLS

"An Integrated Model For Library Media Skills Instruction"

Library media specialists, in the past, have sought to "relate" library media skills instruction to everyday classroom teaching rather than to integrate the two. Teachers have been perfectly willing for library media specialists to "relate" library media skills to classroom studies but have not, typically, integrated library media skills objectives, activities, and assessments into instruction.

The difference between the terms "relate" and "integrate" seems subtle at first, but the operational difference is enormous. Relating library media skills to classroom instruction implies one set of instructional objectives and a separate set of library media skills objectives, one set of instructional activities and a separate set of library media skills activities, one set of instructional assessments and a separate set of library media skills assessments, all more or less related but, at the same time, all very much separate. Integrating library media skills into classroom instruction, on the other hand, implies only one set of instructional objectives, activities and assessment.

The distinct differences between relating and integrating library media skills into classroom instruction are illustrated in Figures 1 & 2. In the unintegrated or "related" model (Figure 1), teachers and library media specialists respectively develop totally separate objectives, activities, and assessments, and though these may be verbally related by teacher and library media specialist, they are not operationally interdependent. In the integrated model (Figure 2), as illustrated by the example, instructional objectives and library media skills objective may be separately formulated, owing to the subject expertise of teachers and the library media skills expertise of library media specialists. However, in planning a teaching unit, instructional objectives and library media objectives are merged into one set of unit objectives. Thereafter, library media skills activities derive their subject matter directly and perhaps exclusively from the unit of study, and classroom teaching activities depend in large part on library media skills instruction. In fact, the distinction between instructional objectives, activities, and assessments on the one hand, and library media skills objectives, activities, and assessments on the other becomes specious as the two are merged into a single instructional unit.

Note: Since the Media Specialist is also a teacher, it is assumed that the designation "teacher" refers to a classroom teacher or other special teacher.

Figure 1. Related Model of Library Media Skills Instruction

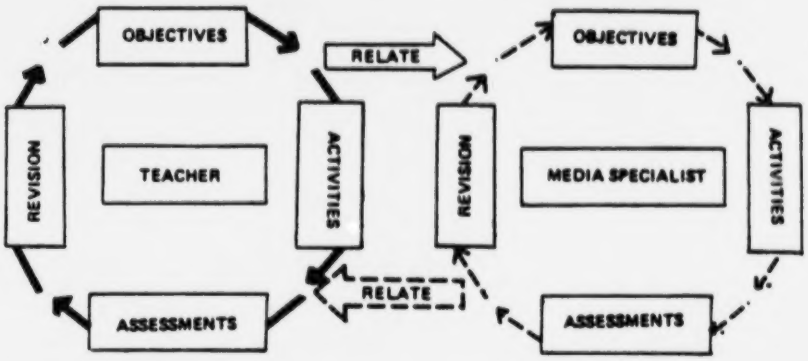
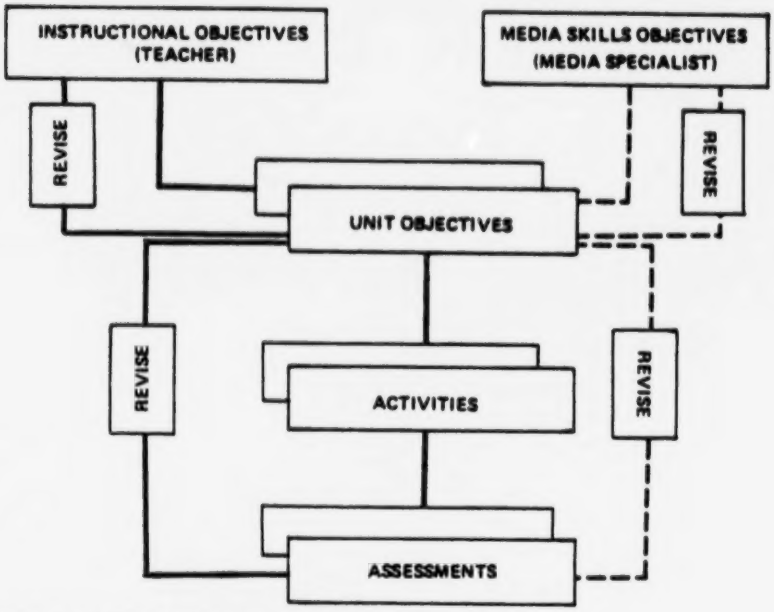


Figure 2. Integrated Model of Library Media Skills Instruction



PROCESS FOR DEVELOPING TERMINAL OUTCOMES

It is recommended that the board of education and the administration in each school district use or adapt the following steps to develop their terminal outcomes; i.e., outcomes that will be achieved by students before graduation:

1. The district curriculum advisory (PER) committee should develop a format and content definitions as modeled in the GOAL AND OUTCOME SPECIFICATION PROCESS document published by the Minnesota Department of Education. This should be done in conjunction with one of the following individuals:

   a. The district curriculum coordinator

b. The district media supervisor

c. A representative of the media personnel in the district

2. In accordance with the cycle adopted for curriculum review (see Section III of the GOAL AND OUTCOME SPECIFICATION PROCESS document), district administration should name a media and technology curriculum committee and provide the resources needed for committee activities, including time and materials. The following general factors should be considered when naming a media and technology curriculum committee:

   a. The committee should be small enough to work effectively as a group.

   b. Media personnel and teachers from all grade levels that provide learning experiences in media and technology should be represented on the committee. Because the elementary curriculum rule requires integration of media and technology with other content areas, it is particularly important that elementary teachers be represented on this curriculum committee.

NOTE: This process can pose special problems to smaller districts. The greatest problems are: lack of staff trained in curriculum development; and too few staff members in the content area to provide breadth and depth. One solution suggested is having groups of districts cooperate to form committees of media personnel and teachers from those districts. This has the advantage of broadening the base of knowledge available to write outcomes.

3. A designated person should:

   a. Arrange for training for each curriculum committee member on:

      - Expectations of the committee for product form and content
      - How to write outcomes
      - The future. Information on projected future developments in the discipline that may change the discipline and developments in society that may put new demands on citizens for knowledge, skill, or affect that could be addressed in the discipline.

   b. Collect and disseminate to the media and technology curriculum committee members, models and samples of outcomes as adopted by the Minnesota Department of Education and other school districts.

   c. Provide ongoing support and direction to the committee and to the discipline when not in the process of recording outcomes.

   d. This designated person could be one of the following:

      - the district curriculum coordinator
      - the district media supervisor
      - a designated representative of media personnel in the district
      - the K-12 media person where there is only one

4. The district media curriculum committee should:

   a. Write goals of the discipline that reflect the overall learner goals of the district.

b. Complete Curriculum Development Form One.

5. The district's curriculum advisory (PER) committee should review the outcomes to assure consistency with board-adopted values, philosophy, mission, goals, and subjects. Specific attention should be given to the differentiation between core outcomes expected of all students and elective outcomes to assure consistency between core outcomes and learner goals. Also, the committee should assure that the outcomes address levels of a taxonomy within each domain. The committee should recommend board adoption.

6. The Board of Education should adopt the goals and terminal outcomes for media and technology, based on the recommendation of the curriculum advisory (PER) committee.

PROCESS FOR TRANSPOSING THE DISTRICT-WIDE OUTCOMES INTO CLASSROOM SCOPE AND SEQUENCE

It is recommended that each school district establish a specific set of procedures by which the staff in each building can transpose the district-wide outcomes into classroom scope and sequence.

There are two issues that must be considered in the design of these procedures.

1. The purpose of the procedures is to provide each media person and classroom teacher with information as to what is expected of students in terms of learning for that grade or class. The aim is alignment of desired outcomes and instruction.

2. It is critical that the procedures not be cumbersome or onerous and equally critical that they be sufficiently specific to achieve their purpose. Thus, the larger the staff (presumably resulting in greater chance for non-alignment) the more structure will be needed. Conversely, the smaller the staff (presumably resulting in less chance for non-alignment) the more likely the purpose can be achieved with minimal structure.

Curriculum is defined as containing the following elements. Samples of each are provided.

HIERARCHY	SAMPLE
OUTCOME	The learner will select materials according to appropriate criteria, such as their being relevant, accurate, authoritative, current, multicultural, gender fair, and of appropriate quality, level of difficulty, and format.
CLUSTER	The learner will recognize stereotyping of minority groups and women in materials.
SUBCLUSTER	The learner will compare the stereotypical images with more factual, accurate information from additional sources.

OBJECTIVE — Given three excerpts from various materials, the learner will identify with 100 percent accuracy those which contain factual and those which contain stereotypical images of minorities and/or women.

ASSESSMENT ITEM — Read the following three excerpts and identify which one contains stereotypical images of American Indians:

A. Your grandmother is one of those who live in harmony with all nature - with earth, coyote, birds in the sky. They know more than many will ever learn. Those Old Ones know.

B. There were five of them, dark shapes on the road, coming from the brick house. They hardly looked like men, the way they moved. They were trotting, stooped over, first one, and then another coming up, like dogs sifting up to the scent of food.

C. John worked from sun up to dusk at the tribal ranch and still only made enough money to care for Norman and his mother. There would never be any extra to save to buy a rifle or lapidary equipment.

_____ A. _____ D. All of the above

_____ B. _____ E. None of the above

_____ C.

The above excerpts were reprinted by permission of the authors:

A. "From ANNIE AND THE OLD ONE by Miska Miles. Text copyright (c) 1971 by Miska Miles. Reprinted permission of Little, Brown, and Company in association with The Atlantic Monthly Press."

B. Walter D. Edmonds, The Matchlock Gun, 1941.

C. Virginia Driving Hawk Sneve, When Thunders Spoke, 1974.

There are six key elements to the procedure. They include:

1. Specification of the clusters for each outcomes.
2. Specification of the subclusters for each cluster.
3. Specification of the standard for student performance (objective).
4. Specification of whether the instruction is for awareness, emphasis, mastery, or reinforcement.
5. Media personnel and teacher design of the instruction in terms of methods, activities, and media.

6. Monitoring implementation of the instruction.

The following procedure is very specific and detailed. It assumes the presence of a building principal with curriculum responsibilities. Each district should review this process and adapt it to meet its situation in consideration of the issues described above.

1. Following Board of Education adoption of the core and elective outcomes for educational media and technology, a designated person should complete column one of CURRICULUM DEVELOPMENT FORM TWO for each grade-level grouping (K-3, 4-6, 7-9, 10-12) or course, and distribute copies of all pages to the principal in each building. The same or another designated person should provide training for the principals to ensure their understanding of the process. The designated person who will fill out the form may be any of the following:

   a. the district curriculum coordinator
   b. the district media supervisor
   c. the superintendent
   d. a principal
   e. a media professional

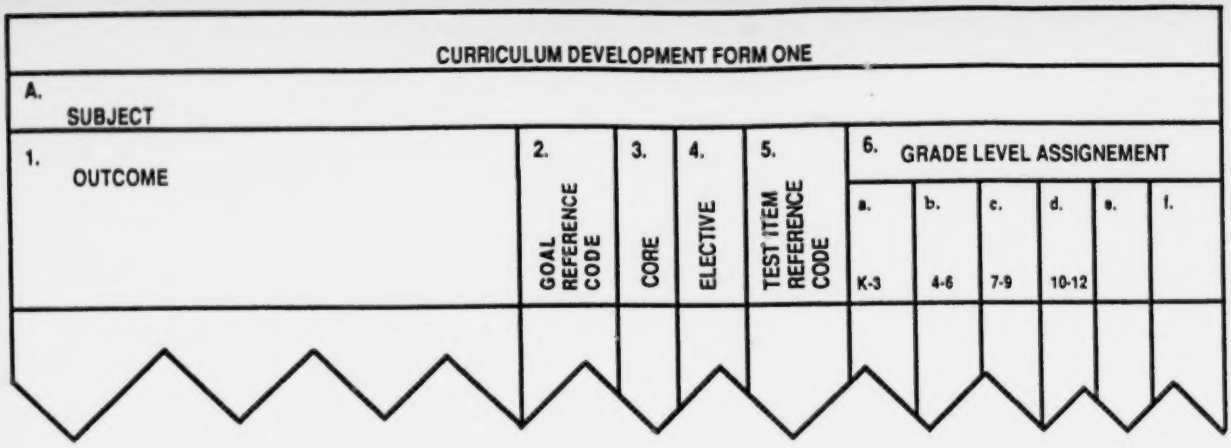
2. Each principal should call separate meetings of the building-level media specialist and all teachers in the grade-level grouping indicated in Box A of CURRICULUM DEVELOPMENT FORM TWO. Each group of teachers and the building-level media specialist should complete the remainder of the form. If there is a District Media and Technology Curriculum Committee, at least one member should attend each such meeting to answer questions and clarify issues. THIS FORM CAN BE OMITTED IF THE ASSIGNMENT OF CURRICULUM DEVELOPMENT FORM ONE IS FOR A SPECIFIC COURSE OR SINGLE GRADE LEVEL.

3. Using the form completed in step two or one, each principal should complete Boxes A-D of CURRICULUM DEVELOPMENT FORM THREE for each grade level or course.

4. Each principal should call separate meetings of the media specialist and all teachers in each grade level or course for which the principal has prepared CURRICULUM DEVELOPMENT FORM THREE. The media specialist and the group of teachers should complete the remainder of the form. If there is a district media and technology curriculum committee, a member of this committee should attend each such meeting to answer questions, clarify concerns, and provide technical information regarding development of clusters and subclusters for each outcome.

5. The media specialist and each teacher should use the completed CURRICULUM DEVELOPMENT FORM THREE appropriate to his or her grade or course as a base to complete CURRICULUM DEVELOPMENT FORM FOUR. A set of these forms becomes the media specialist's and teacher's annual plan for providing instruction in this subject area. One CURRICULUM DEVELOPMENT FORM FOUR should be completed for each cluster for which the media specialist and teacher have instructional responsibility. The forms should be reviewed annually to update and modify as appropriate.

The following are the four curriculum development forms with instructions. They are followed by five samples of media outcomes that have been expanded using the curriculum development forms.



LINE

A. Enter subject area.

COLUMN

1. List all outcomes for the subject in a sequence determined by the grade level grouping in which initial awareness level instruction is to be provided.

2. Enter a reference code to the district's learner goal(s) that justifies inclusion of the outcome.

3. Check whether the outcome is considered to be a reasonable expectation for all students.

4. Check whether the outcome is an elective that a student may elect to develop or one for which a teacher may elect to provide instruction for some or all students.

   NOTE: If the discipline curriculum committee determines that within any one outcome there are some clusters that are core and some that are elective, that committee should differentiate on this form by placing the clusters in the outcome column.

5. Enter a reference code for the test items or procedures that are to be used to determine student proficiency.

6. Enter an "A" in the column that indicates the grade levels in which awareness instruction is provided.
   Enter an "E" in the column that indicates the grade levels in which emphasis instruction is provided.
   Enter an "M" in the column that indicates the grade levels in which mastery attainment is expected.
   Enter an "R" in the column that indicates the grade levels in which reinforcement instruction is provided.

   NOTE: The grouping of grade levels should be modified by each district to correlate with its organizational pattern; e.g., K-6 or K-5 or K-4 elementary school; junior high or middle school; three-year or four-year senior high. Also, some or all of the subcolumns in column six may be modified to indicate a particular course instead of a grade level grouping.

CURRICULUM DEVELOPMENT FORM TWO				
A. SUBJECT		B. GRADE LEVEL GROUPING		
1. OUTCOME	2. GRADE LEVEL AWARENESS	3. GRADE LEVEL EMPHASIS	4. GRADE LEVEL MASTERY	5. GRADE LEVEL REINFORCEMENT

BOX

A. Enter subject area.
B. Enter grade level grouping from column six Curriculum Development Form One.

COLUMN

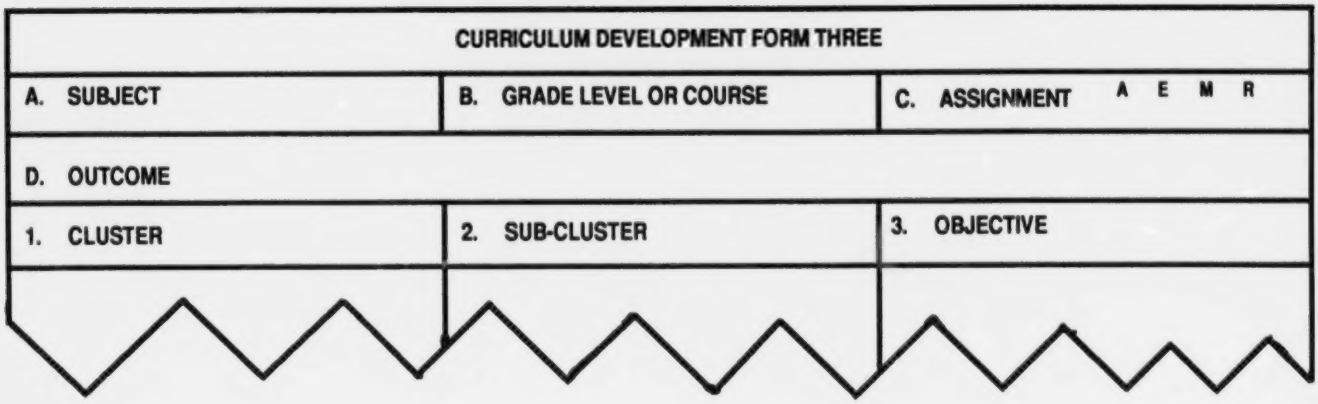
1. Enter all appropriate outcomes from Curriculum Development Form One.

2. Enter the grade level within the grouping at which awareness instruction is to be provided.

3. Enter the grade level(s) within the grouping at which emphasis instruction is to be provided.

4. Enter the grade level within the grouping at which student mastery is expected. This is the grade level at which the test item or procedure designed to determine student attainment is to be used.

5. Enter the grade level(s) within the grouping at which reinforcement instruction is to be provided.



BOX

A. Enter the subject area.

B. Enter the grade level or course to which the form applies.

C. Circle one or more as appropriate: A = Awareness Instruction; E = Emphasis Instruction; M = Student Mastery; R = Reinforcement Instruction.

D. Enter the complete outcome.

COLUMN

1. In consideration of the assignment, list the clusters for which instruction is to be provided at the grade level.

2. List the subclusters of each cluster necessary to provide instruction to the level of assignment. There may be no subclusters for some clusters.

3. **Complete only if the assignment is student mastery.** Write the subclusters in measurable terms.

CURRICULUM DEVELOPMENT FORM FOUR		
A. SUBJECT	B. GRADE LEVEL OR COURSE	C. ASSIGNMENT A E M R
D. OUTCOME		
E. CLUSTER		
1. CLUSTER SUB-CLUSTER OR OBJECTIVE	2. QUARTER IN WHICH INSTRUCTION IS TO BE PROVIDED	3. METHODS - ACTIVITIES - MEDIA

BOX

A. Enter the subject area.

B. Enter the grade level or course to which the form applies.

C. Circle one or more as appropriate: A = Awareness Instruction; E = Emphasis Instruction; M = Student Mastery; R = Reinforcement Instruction.

D. Enter one cluster for the outcome. Complete this only if there are subclusters written for the cluster.

COLUMN

1. Enter one cluster if no subclusters are written; or
   Enter a subcluster if no objective is written; or
   Enter an objective.

2. Enter the quarter of the year in which instruction is to be provided.

3. Describe methods, materials, and media to be used to provide instruction.

CURRICULUM DEVELOPMENT FORM ONE

A. SUBJECT Media/Social Studies

1. OUTCOME	2. GOAL REFERENCE CODE	3. CORE	4. ELECTIVE	5. TEST ITEM REFERENCE CODE	6. GRADE LEVEL ASSIGNEMENT					
					a. K-3	b. 4-6	c. 7-9	d. 10-12	e.	f.
ACCESSING INFORMATION:										
I. H. The learner will understand the concept of copyright and demonstrate respect for ownership.		x			A	E	E	M		
PROCESSING INFORMATION:										
II. E. 2. The learner will acknowledge the various ethical and legal issues related to technology.		x			A	E	E	M		

CURRICULUM DEVELOPMENT FORM TWO				
A. SUBJECT Media/Social Studies		B. GRADE LEVEL GROUPING K-3, 4-6, 7-8, 9-12		
1. OUTCOME	2. GRADE LEVEL AWARENESS	3. GRADE LEVEL EMPHASIS	4. GRADE LEVEL MASTERY	5. GRADE LEVEL REINFORCEMENT
ACCESSING INFORMATION				
I. H. The learner will understand the concept of copyright and demonstrate respect for ownership.				
1) The learner will understand the purpose of the copyright law.	4-6	7-8	10	12
2) The learner will understand and observe the copyright law as it applies to computer software.	K-3	4-6	7-8	9-12
3) The learner will understand and observe the copyright law as it applies to print and non-print materials.	4-6	7-8		9-12

CURRICULUM DEVELOPMENT FORM THREE		
A. SUBJECT Media	B. GRADE LEVEL OR COURSE 6	C. ASSIGNMENT A (E) M R
D. OUTCOME The learner will understand the concept (purpose) of the copyright law and demonstrate a respect for ownership by practicing it.		
1. CLUSTER	2. SUB-CLUSTER	3. OBJECTIVE
The learner will understand and observe the copyright law as it applies to computer software.	The student will understand the ethical implications of computer piracy and hacking.	The student will refrain from making illegal copies of computer software that is copyrighted.

CURRICULUM DEVELOPMENT FORM FOUR		
A. SUBJECT Media/Social Studies	B. GRADE LEVEL OR COURSE 6	C. ASSIGNMENT (A) (E) M R
D. OUTCOME ACCESSING INFORMATION: I. H. The learner will understand the concept of copyright and demonstrate respect for ownership.		
E. CLUSTER The learner will understand and observe the copyright law as it applies to computer software.		

1. CLUSTER SUB-CLUSTER OR OBJECTIVE	2. QUARTER IN WHICH INSTRUCTION IS TO BE PROVIDED	3. METHODS - ACTIVITIES - MEDIA
The learner will understand that computer piracy and hacking harms other people.		(1) Modeling ethical copyright behavior (teachers and other staff) (2) ETHICS IN THE COMPUTER AGE (filmstrip). Walt Disney, color, with cassettes. Two filmstrips in this series - 1) Pirates and 2) Hacker, give two dramatic vignettes on the consequences of computer piracy. (3) HOT COPIES (computer disk). Bloomington Information Technology System (BITS). Available from the Bloomington Instructional Materials Center, 8900 Portland Ave. S., Bloomington, MN 55420 Three classroom simulations on computer ethics are followed by 3 programs for individual or small group use.

CURRICULUM DEVELOPMENT FORM ONE

A. SUBJECT Media/All other subject areas

1. OUTCOME	2. GOAL - REFERENCE CODE	3. CORE	4. ELECTIVE	5. TEST ITEM REFERENCE CODE	6. GRADE LEVEL ASSIGNEMENT					
					a. K-3	b. 4-6	c. 7-9	d. 10-12	e.	f.
PROCESSING INFORMATION:										
II. Media Literacy										
A. The learner will understand and be able to evaluate the process involved in creating media messages.	-	x	-	-	A	E	M			

CURRICULUM DEVELOPMENT FORM TWO				
A. SUBJECT Media/All other subject areas		B. GRADE LEVEL GROUPING		
1. OUTCOME	2. GRADE LEVEL AWARENESS	3. GRADE LEVEL EMPHASIS	4. GRADE LEVEL MASTERY	5. GRADE LEVEL REINFORCEMENT
PROCESSING INFORMATION: II. Media Literacy A. The learner will understand and be able to evaluate the process involved in creating media messages.	3 or 4	5 or 6	7 or 8	

CURRICULUM DEVELOPMENT FORM THREE		
A. SUBJECT	B. GRADE LEVEL OR COURSE 5/6	C. ASSIGNMENT A (E) M R
D. OUTCOME Processing Information: Media Literacy		
1. CLUSTER	2. SUB-CLUSTER	3. OBJECTIVE
The learner will understand and be able to evaluate the process involved in creating media messages.	The learner will interpret the effects of the unique properties of the medium on the message.	1. The learner will distinguish the effect of two different mediums on presenting the same messages. 2. The learner will evaluate the content of two different forms of media based on pre-determined criteria. 3. The learner will translate a message from one medium to another.

CURRICULUM DEVELOPMENT FORM FOUR			
A. SUBJECT	Media/All other subject areas	B. GRADE LEVEL OR COURSE 5 or 6	C. ASSIGNMENT A (E) M R
D. OUTCOME	PROCESSING INFORMATION: II. Media Literacy A. The learner will understand and evaluate the process involved in creating media messages.		
E. CLUSTER	3. The learner will evaluate the effects of the unique properties of the medium on the message.		

1. CLUSTER SUB-CLUSTER OR OBJECTIVE	2. QUARTER IN WHICH INSTRUCTION IS TO BE PROVIDED	3. METHODS - ACTIVITIES - MEDIA
A. The learner will distinguish the effect of two different mediums on presenting the same message. B. The learner will evaluate the content of two different forms of media based on predetermined criteria. C. The learner will translate a message from one medium to another.		a. A book and movie of the same title will be presented with the class listing the uniqueness of each medium in presenting the message. (The Red Balloon) b. Criteria will be developed to evaluate the impact between the filmloop portraying a scientific concept and a model of the concept in teaching a scientific concept. (e.g., a butterfly hatching from a cocoon) c. A videotape will be developed from a storyboard.

CURRICULUM DEVELOPMENT FORM ONE

A. SUBJECT Media/All other subject areas

1. OUTCOME	2. GOAL REFERENCE CODE	3. CORE	4. ELECTIVE	5. TEST ITEM REFERENCE CODE	6. GRADE LEVEL ASSIGNEMENT					
					a. K-3	b. 4-6	c. 7-9	d. 10-12	e.	f.
PROCESSING INFORMATION:										
II. Media Literacy										
E. The learner will recognize the impact of technology on daily life.	-	x		-	A	E	M	R		

CURRICULUM DEVELOPMENT FORM TWO				
A. SUBJECT Media/All other subject areas		B. GRADE LEVEL GROUPING		
1. OUTCOME	2. GRADE LEVEL AWARENESS	3. GRADE LEVEL EMPHASIS	4. GRADE LEVEL MASTERY	5. GRADE LEVEL REINFORCEMENT
PROCESSING INFORMATION: II. Media Literacy E. The learner will recognize the impact of technology on daily life.	1 or 2	3 or 4	5 or 6	7-12

CURRICULUM DEVELOPMENT FORM THREE		
A. SUBJECT Media/All other curriculum areas	B. GRADE LEVEL OR COURSE 3/4	C. ASSIGNMENT A (E) M R
D. OUTCOME Processing Information: Media Literacy		
1. CLUSTER lesson	2. SUB-CLUSTER instructional objective	3. OBJECTIVE behavioral objective
The learner will recognize the impact of technology on his/her daily life and the use of time.	Analyze the impact of technology on the use of time.	1. The learner will recognize the amount of time he/she spends each week watching television. 2. The learner will become aware of alternative activities to watching television. 3. The learner will use available resources to make decisions about use of time, i.e. television guide.

CURRICULUM DEVELOPMENT FORM FOUR			
A. SUBJECT: Media/All other subject areas	B. GRADE LEVEL OR COURSE: 3 or 4	C. ASSIGNMENT: (A) E M R	
D. OUTCOME: PROCESSING INFORMATION: II. Media Literacy			
E. CLUSTER: E. The learner will recognize the impact of technology on daily life.			
1. CLUSTER SUB-CLUSTER OR OBJECTIVE	2. QUARTER IN WHICH INSTRUCTION IS TO BE PROVIDED	3. METHODS - ACTIVITIES - MEDIA	
3. The learner will analyze the impact of technology on the use of time. a. The learner will recognize the amount of time he/she spends each week watching television. b. The learner will become aware of alternative activities to watching television. c. The learner will use available resources to make decisions about use of time, e.g., television guide.	- - - - - - - - - - - -	(1.) Each student will keep a chart of time spent watching television each day for a week. (2.) After interviewing at least three people, a list of alternative activities to watching television will be generated. (3.) The students will plan their television viewing for one week using a television guide. Alternative activities to watching television can also be indicated in the plan. (4.) Students will discuss how their viewing is the same/different than a previous time.	

CURRICULUM DEVELOPMENT FORM ONE

A. SUBJECT Media/Language Arts

1. OUTCOME	2. GOAL REFERENCE CODE	3. CORE	4. ELECTIVE	5. TEST ITEM REFERENCE CODE	6. GRADE LEVEL ASSIGNEMENT a. K-3	b. 4-6	c. 7-9	d. 10-12	e.	f.
PROCESSING INFORMATION:										
III. Thinking and Research Processes										
A. The learner will evaluate the reliability and relevance of periodicals.			x				A	E		
1. determine the purpose and intent of the periodical										
2. determine the intended audience										
3. recognize point of view										
4. assess the relevance, accuracy, authority for the subject and intended audience										

CURRICULUM DEVELOPMENT FORM TWO				
A. SUBJECT Media/Language Arts		B. GRADE LEVEL GROUPING 6, 10, 12		
1. OUTCOME	2. GRADE LEVEL AWARENESS	3. GRADE LEVEL EMPHASIS	4. GRADE LEVEL MASTERY	5. GRADE LEVEL REINFORCEMENT
PROCESSING INFORMATION:				
III. Thinking and Research Processes				
A. The learner will evaluate the reliability and relevance of sources (periodicals)	6	10		12

CURRICULUM DEVELOPMENT FORM THREE		
A. SUBJECT Media/Language Arts	B. GRADE LEVEL OR COURSE 10th Grade English	C. ASSIGNMENT (A) (E) M R
D. OUTCOME The learner will be aware of the various communication influences of periodicals		
1. CLUSTER	2. SUB-CLUSTER	3. OBJECTIVE
Students will recognize the wide variety of periodicals available as resources in the various subject areas. Students will understand that each periodical has an intended audience, purpose and financial support system. Students will understand that indexes exist to access individual articles in magazines and that these indexes are not limited to the Readers' Guide.	Students will be able to identify periodicals by subject, frequency of publication, and intended audience. Students will make judgments on advertising content and volume.	

CURRICULUM DEVELOPMENT FORM FOUR		
A. SUBJECT Media/Language Arts	B. GRADE LEVEL OR COURSE 10 English	C. ASSIGNMENT (A) (E) M R
D. OUTCOME PROCESSING INFORMATION: III. Thinking and Research Processes. A. The learner will evaluate the reliability and relevance of sources.		
E. CLUSTER The learner will evaluate the reliability and relevance of periodicals.		

1. CLUSTER SUB-CLUSTER OR OBJECTIVE	2. QUARTER IN WHICH INSTRUCTION IS TO BE PROVIDED	3. METHODS - ACTIVITIES - MEDIA
Students will recognize the wide variety of periodicals available as resources in the various subject areas. Students will be able to identify periodicals by subject, frequency of publication, and intended audience. Students will understand that each periodical has an intended audience, purpose and financial support system. Students will make judgments on advertising content and volume. Students will understand that indexes exist to access individual articles in magazines and that these indexes are not limited to the Readers' Guide.	Fall, Winter and Spring	Lecture by media specialist, 100 magazines (all different titles), Readers' Guide, Subject Bibliography of Periodicals. Worksheet for student evaluation.

CURRICULUM DEVELOPMENT FORM ONE

A. SUBJECT Media/Science

1. OUTCOME	2. GOAL REFERENCE CODE	3. CORE	4. ELECTIVE	5. TEST ITEM REFERENCE CODE	6. GRADE LEVEL ASSIGNEMENT					
					a. K-3	b. 4-6	c. 7-9	d. 10-12	e.	f.
PROCESSING INFORMATION:										
III. Thinking and Research Processes										
E. Research process	-	x	-	-	A-E	E-M	R	R		

CURRICULUM DEVELOPMENT FORM TWO				
A. SUBJECT Media/Science		B. GRADE LEVEL GROUPING K-3		
1. OUTCOME	2. GRADE LEVEL AWARENESS	3. GRADE LEVEL EMPHASIS	4. GRADE LEVEL MASTERY	5. GRADE LEVEL REINFORCEMENT
PROCESSING INFORMATION:				
III. Thinking and Research Processes e.g.,: Weather topics - fog/frost - wind - storms - rain	K-2	3-6	6	7-12

CURRICULUM DEVELOPMENT FORM THREE		
A. SUBJECT Media: Science (Weather)	**B. GRADE LEVEL OR COURSE** 3 (High reading ability)	**C. ASSIGNMENT** A (E) M R
D. OUTCOME Processing Information: Thought processes		
1. CLUSTER	**2. SUB-CLUSTER**	**3. OBJECTIVE**
Research Processes e.g.: Frost & fog	(#4) Infer causal meanings among noted ideas. e.g.: freezing temp in air warm earth (#5) Infer parallel relationships between notes and knowledge e.g.: ice water in glass	Having gathered notes about an aspect of the topic: - students examine ways that the noted thoughts cause and/or effect one another. e.g.: frozen dew/frost - students examine notes for likenesses and differences between notes and experience/knowledge. e.g.: ice water in glass on a hot day

CURRICULUM DEVELOPMENT FORM FOUR		
A. SUBJECT Media/Science	B. GRADE LEVEL OR COURSE 3 (High reading ability)	C. ASSIGNMENT A (E) M R
D. OUTCOME PROCESSING INFORMATION: III. Thinking and Research Processes		
E. CLUSTER		

1. CLUSTER SUB-CLUSTER OR OBJECTIVE	2. QUARTER IN WHICH INSTRUCTION IS TO BE PROVIDED	3. METHODS - ACTIVITIES - MEDIA
PROCESSING INFORMATION: III. Thinking and Research Processes E. The learner will demonstrate ability to use the research process. e.g.: Frost & fog 4. The learner will infer cause-effect relationships among the information. e.g.: Freezing temp in air - warm earth 5. The learner will relate information to knowledge and/or experiences e.g.: Ice water in glass	3	<u>Methods & Media</u> Demonstration by example - transparency of note-taking form - sample notes from a student's research Transfer by modeling - students' researched notes about their weather topics Guided and/or independent practice - students' notes, forms, and thought processes <u>Activities</u> Having gathered notes about an aspect of the topic: - Students examine ways that the noted thoughts cause and/or effect one another e.g.: Frozen dew/frost - Students examine notes for likenesses and differences between notes and experience/ knowledge e.g.: Ice water in glass on a hot day

APPENDIX I

MODEL LEARNER OUTCOMES FOR MEDIA AND TECHNOLOGY IN ELEMENTARY SCHOOLS

State Board of Education Learner Goals A.1 - L.7	Classification K = Knowing Ap = Applying I = Integrating (Analysis, Synthesis, Evaluation)	P = Psychomotor Af = Affective MG = Multicultural Gender Fair IG = International/ Global Concept Development	Assessment

State Board of Education Learner Goals	Learner Outcomes	Classification	Assessment

ACCESSING INFORMATION Learners will become familiar with and understand the potential of the wide variety of information sources and personnel available in their schools, communities, state, nation, and global society. Learners will locate and use information from these sources. Learners will actively pursue information according to their particular academic and individual needs. The learner will understand that there are a variety of formats and materials to accommodate all ability levels and learning styles.

I. LOCATION, PHYSICAL ARRANGEMENT AND PERSONNEL

A, D.3

A. The learner will identify and locate the information systems and resources appropriate to their needs. — K, IG

1. school/district/regional library/media center
2. public library, governmental agencies, television, radio, newspapers, community agencies
3. cable systems, satellite technology, local and statewide computer networks and databases

A, B.1

B. The learner will locate the different storage areas within an information system and understand their function and organization. — Ap

e.g., fiction
non-fiction
reference
periodicals
newspapers
computers
filmstrips
records
films
videotape/disc
easy/picture books
equipment

A, B.1

C. The learner will differentiate among and choose the appropriate activity areas in which to complete media tasks assigned from the classroom or to satisfy personal needs. — I

e.g., reading
researching
listening and viewing
producing
hearing stories
circulating materials and equipment
conferring in small or large groups
computing
teleconferencing
video-conferencing

BEST COPY AVAILABLE

State Board of Education Learner Goals A.1 - L.7	Classification K = Knowing Ap = Applying I = Integrating (Analysis, Synthesis, Evaluation)	P = Psychomotor Af = Affective MG = Multicultural Gender Fair IG = International/ Global Concept Development	Assessment

State Board of Education Learner Goals	Learner Outcomes	Classification	Assessment
D, E	D. The learner will demonstrate an understanding of the roles and expertise of the people working in information systems.	K, Ap	
	II. POLICIES AND PROCEDURES		
B.5	A. Learners will understand and practice the circulation procedures for print, nonprint and equipment, in whatever information system they are using.	K, Ap	
B.5	B. The learner will help other students locate information and work in groups when appropriate to communicate shared knowledge and experience.		
B.6	C. The learner will identify and demonstrate ways of caring for media, equipment, and facilities so that life span is extended and upkeep is minimized.	K, Ap, Af	
B.5	D. The learner will generalize that when media centers provide for many users, everyone must operate under established policy and operating procedures.	I	
	III. SELECTION AND USE		
B.1	A. The learner will understand that there are two major ways to organize materials - alphabetical and numerical - in information systems and will understand why materials are housed in particular locations. 1. alphabetic - author, title, subject 2. numeric - Dewey Decimal Classification, sequential numbers	K	
B.1, D.3	B. The learner will identify the purpose and arrangement of a wide variety of indexing tools and cataloging systems and use them to locate information. 1. book, card, or electronic catalogs, periodical indexes, telephone books, pamphlet and newspaper indexes, etc. 2. electronic databases	K, Ap	
B.1	C. The learner will generalize that sources usually offer a system of helps, such as indexes and cataloging systems, to the user who seeks both specific and general information. e.g., Indexes tables of contents user's instructions legends graphic clues cross references thesauri		

State Board of Education Learner Goals A.1 - L.7	Classification K = Knowing Ap = Applying I = Integrating (Analysis, Synthesis, Evaluation)	P = Psychomotor Af = Affective MG = Multicultural Gender Fair IG = International/ Global Concept Development	Assessment

State Board of Education Learner Goals	Learner Outcomes	Classification	Assessment
A.6, C	D. Learners will recognize and locate the various media forms and know which form is appropriate to meet their individual needs. The learner will know and use the delivery system that is appropriate to each form. The learner will operate the equipment associated with the various delivery systems.	K, Ap, P	
	1. media forms - print, video, audio, computer disk, microform, 2. delivery systems - audio, visual, electronic, projection, telecommunication, print, robotic		
A.	E. The learner will identify the basic components of print, audiovisual, and electronic materials and systems.	K, Ap	
	a. print - author/editor, title, illustrator, publisher, copyright date, title page, table of contents, index, etc.		
	b. audiovisual/electronic - title, credits, menu, user's instructions, etc.		
A.	F. The learner will use the basic components of media and distinguish which are relevant for a variety of purposes.	Ap, I	
B.4	G. The learner will understand the concept of copyright and demonstrate respect for ownership.	K, Af	
A.1	H. The learner will recognize, use and demonstrate preferences for particular kinds and/or forms of literature including multicultural, gender fair materials.	K, Ap, I, MG, IG	
	e.g., autobiography biography easy/picture book fiction mystery fiction science fiction Western fiction mythology folktale/fairy tale/legend interactive fiction short story poem news story feature story		
A, C, D	I. The learner will select materials according to appropriate criteria, such as their being relevant, accurate, authoritative, current, multicultural, gender fair, and of appropriate quality, level of difficulty, format, and personal interest.	K, Ap, MG	

State Board of Education Learner Goals A.1 - L.7	Classification K = Knowing Ap = Applying I = Integrating (Analysis, Synthesis, Evaluation)	P = Psychomotor Af = Affective MG = Multicultural Gender Fair IG = International/ Global Concept Development	Assessment

State Board of Education Learner Goals	Learner Outcomes	Classification	Assessment

PROCESSING INFORMATION: The learner will comprehend and apply concepts presented in media. The learner will apply critical reading, viewing, and listening skills in resource selection and in analyzing available resources. The learner will apply thinking processes in organizing, analyzing, and interpreting information and developing evaluative skills in order to become an intelligent consumer of information for the purpose of solving problems and making decisions.

	I.	**SELECTION AND USE**	
A	A.	Learners will analyze their information needs in terms of questions to be explored.	I
A	B.	The learner will compare and contrast differences in content and format in available information resources such as books, filmstrips, realia, video, computer, and reference tools.	I
A	C.	The learner will compare and contrast the value of various types of resources for data gathering. These resources may be indexes to information, communication tools, community information resources, and/or technological information systems such as online databanks.	I
A	D.	The learner will make choices about the data based on the content and format of the resources available.	I
	II.	**MEDIA LITERACY**	
A, B, C	A.	The learner will understand and evaluate the process involved in creating media messages.	K, Ap, I
		1. The learner will analyze a media production to determine the relationships of the components to the purpose of the overall work (e.g.,, analyze a record album to determine the relationship of the musical score, lyrics, and graphics to the purpose of the overall work).	I
		2. The learner will compare and contrast the methods used in making a book, film, videotape, radio show, newspaper, and magazine.	I
		3. The learner will interpret the effects of the unique properties of the medium on the message.	
B.9, C	B.	The learner will recognize, interpret, and create visual images.	
		1. The learner will identify, interpret, analyze and evaluate the influence of visual communication on language, thought, and experience.	K, Ap, I
		2. The learner will recognize the effects of distortion, stereotyping, propaganda, and violence in visual media.	K
		3. The learner will recognize and appreciate the aesthetics of visual images and of image creation.	K, Af
		4. The learner will create mental images by inference from non-visual messages and will communicate to others through the creation of visual images.	Ap, I

State Board of Education Learner Goals A.1 - L.7	Classification K = Knowing Ap = Applying I = Integrating (Analysis, Synthesis, Evaluation)	P = Psychomotor Af = Affective MG = Multicultural Gender Fair IG = International/ Global Concept Development	Assessment

State Board of Education Learner Goals	Learner Outcomes	Classification	Assessment
A, C	C. The learner will recognize and interpret media messages, including the persuasive methods inherent in some media messages.	K, Ap, I	
	1. The learner will decode visual and verbal images as well as literary images.	K	
	2. The learner will determine the main idea, purpose, and intent of the message.	K, Ap	
	3. The learner will identify the reasons for presenting a promotional message.	K, Ap	
	4. The learner will analyze the way in which size, shape, color, camera angle, and focus influence the appeal in visual promotional messages.	I	
	5. The learner will use evaluative criteria to judge media messages such as their being relevant, accurate, multicultural, gender fair, and of appropriate quality.	I	
	6. The learner will appreciate the importance of using analytical skills with media as it influences opinion.	Af	
	D. The learner will recognize and make connections between a chain of events, how they are reported, and the resulting impact they have on the public.	K, Ap, I	
	1. The learner will determine events which link to each other in a chain of cause-effect relationships.		
	2. The learner will exercise thinking skills to interpret the relationships between events and the reporting of those events by the media.		
B.8	E. The learner will recognize the impact of technology on daily life.	K, Ap	
	1. The learner will describe ways technology is used at home, at school and in the community.	K	
	2. The learner will acknowledge the various ethical and legal issues related to technology.	K	
	e.g., software/telecommunication piracy computer hacking sex equity poor/discrimination		
	3. The learner will analyze the impact of technology on the use of time.	I	
A, C	**III. THINKING AND RESEARCH PROCESSES**		
C.3	A. The learner will distinguish between relevant and irrelevant sources.	I	
C	B. The learner will use relevant sources of information.	Ap	
	1. The learner will recognize the importance of using more than one source to obtain information.	K	

BEST COPY AVAILABLE

State Board of Education Learner Goals A.1 - L.7	Classification K = Knowing Ap = Applying I = Integrating (Analysis, Synthesis, Evaluation)	Assessment P = Psychomotor Af = Affective MG = Multicultural Gender Fair IG = International/ Global Concept Development

State Board of Education Learner Goals	Learner Outcomes	Classification	Assessment
	4. The learner will identify points of agreement and disagreement among the sources.	K	
C	C. The learner will organize, analyze, interpret, and summarize information obtained from various sources.	Ap, I	
	1. The learner will identify central elements in information.	K	
	2. The learner will classify information through such techniques as grouping and labeling.	I	
	3. The learner will distinguish statements of fact from statements of opinion.	I	
	4. The learner will distinguish similarities and differences in points of view in primary and secondary sources.	I	
	5. The learner will make inferences from data.	I	
	6. The learner will identify cause and effect relationships.	K	
	7. The learner will summarize information.	K	
C	D. The learner will use summarized information for various purposes.	A	
	1. The learner will test hypotheses.	I	
	2. The learner will draw conclusions.	I	
	3. The learner will offer solutions to problems.	I	
	4. The learner will make predictions.	I	
A.2, C, I.2, I.7	E. The learner will demonstrate ability to use the research process.	Ap	
	1. The learner will identify the subject to be researched.	K	
	2. The learner will select sources about the subject.	Ap	
	3. The learner will choose key ideas from the sources.	Ap	
	4. The learner will infer cause-effect relationships among the information.	I	
	5. The learner will relate information to knowledge and/or experiences.	A	
	6. The learner will relate information to examples.	A	
	7. The learner will extend concepts with definitions.	A	
	8. The learner will use several other identifying nouns in reference to the subject.	A	
	9. The learner will organize key ideas into areas based either on likenesses or cause-effect relationships.	Ap	
	10. The learner will name or label each categorical area.	I	
	11. The learner will organize these categories into an outline.	Ap	
	12. The learner will develop a topic sentence for each topic category in the outline.	I	
	13. The learner will organize the notes in a sequence of logical order.	Ap	
	14. The learner will prepare a report in written, oral and/or audiovisual form.	K, Ap, I	

State Board of Education Learner Goals A.1 - L.7	Classification K = Knowing Ap = Applying I = Integrating (Analysis, Synthesis, Evaluation)	P = Psychomotor Af = Affective MG = Multicultural Gender Fair IG = International/ Global Concept Development	Assessment

State Board of Education Learner Goals	Learner Outcomes	Classification	Assessment

COMMUNICATING INFORMATION Learners will select the most appropriate technology to communicate their messages. The learner will design, produce, and present information in a variety of formats appropriate to the message being communicated. The learner will use multicultural, gender fair concepts in the design of the production. Learners will evaluate the presentation of information produced by themselves and others.

I. SELECTION OF MEDIA FORMATS FOR COMMUNICATION

A, J.2

A. The learner will identify, select and use materials including those that are multicultural, gender fair, and appropriate to the information being communicated and to the intended audience's maturity and ability level. — K, Ap, I, MG, IG

1. Print - Books, periodials, photographs, maps, transparencies, computer printouts, databases
2. Audiovisual - cassette tapes, records, films, slides, charts, graphs, videotapes, or disks, filmstrips, computer programs

A.2, A.6

B. The learner will identify, select and use equipment properly for reporting and presenting purposes. — K, Ap, P

1. Audio

e.g., microphone
cassette recorders
record players
radio
telephone

2. Visual

e.g., overhead and opaque projector
8 and 16 mm film projector
videotape or disk player or projector
filmstrip projector
television (including cable and satellite)
slide projector
computer

3. Textual

e.g., word processing/microcomputer
duplication
overhead/transparency

C. The learner will identify and assess characteristics of the content that affect the choice of format such as color, motion, sound

e.g., color for bird identification
audio for bird call identification

BEST COPY AVAILABLE

State Board of Education Learner Goals A.1 - L.7	Classification K = Knowing Ap = Applying I = Integrating (Analysis, Synthesis, Evaluation)	P = Psychomotor Af = Affective MG = Multicultural Gender Fair IG = International/ Global Concept Development	Assessment

State Board of Education Learner Goals	Learner Outcomes	Classification	Assessment

II. PRODUCTION

A.6, B.9

A. The learner will recognize and use the equipment and materials necessary to create an original production. K, P

1. Equipment
   a. print - dry mount press, lettering equipment, transparency makers
   b. audio - microphone, cassette recorder
   c. visual - video and 35mm camera, editing and developing equipment, mixers, computers

2. Materials
   a. print - transparencies, charts, flannel boards, bulletin boards, computer programs and visuals
   b. audio - cassette tapes, records
   c. visual - videotapes or 8mm films, slides, filmstrips, live television
   d. other - puppets, dioramas

A, B.9, I.2, I.7, J.3

B. The learner will create an orignal production that is effectively organized to convey the intended message, uses correct production techniques, is multicultural and gender fair, is appropriate for the intended audience, and is aesthetic and creative in its design. K, Ap, I, P, Af, MG

1. The learner will identify production techniques for persuasive messages such as those used in advertising, e.g., band wagon, generalizations, popular personalities, etc.

2. The learner will identify and practice principles of aesthetic design such as use of line and balance.

3. The learner will identify correct form and style of print documents such as bibliographies.

4. The learner will organize content by outlining, making a rough draft, scripting, or storyboarding.

5. The learner will produce items such as:

   videotape
   8mm film
   color lift transparencies
   newspapers
   preserved items including dry mount and hot lamination
   signs or charts using lettering devices
   written reports using word processing and computer graphics
   simple computer databases

State Board of Education Learner Goals A.1 - L.7	Classification K = Knowing Ap = Applying I = Integrating (Analysis, Synthesis, Evaluation)	P = Psychomotor Af = Affective MG = Multicultural Gender Fair IG = International/ Global Concept Development	Assessment

State Board of Education Learner Goals	Learner Outcomes	Classification	Assessment
F.4	C. The learner will work cooperatively with other students in creating a production by recognizing and completing specific tasks as a part of the team effort, using cross-cultural, cross-gender communications skills.	Ap, I, P, Af, MG	
	III. PRESENTATION		
C.1, J.3	A. The learner will select appropriate location and equipment for presenting the production.	Ap	
A.4, I, J.3	B. The learner will present media using correct techniques.	Ap, P	
	1. The learner will use proper delivery techniques such as: posture, voice level, eye contact, enunciation, microphone skills.	Ap, P	
	2. The learner will demonstrate the correct use of format, such as: appropriate audio volume and size of visuals.	Ap, P	
	IV. EVALUATION		
C.3, I.3	A. Learners will evaluate the effectiveness of their communication efforts by using predetermined criteria, such as clarity of voice, appropriate format, operation of equipment, legibility of document.	I	
C.3, I.3	B. Learners will analyze the evaluation results to improve their communication.	I	

GLOSSARY FOR EDUCATIONAL MEDIA AND TECHNOLOGY LEARNER OUTCOMES

Affective - one of the domains; includes those outcomes which are emotional, feeling, attitudinal, or valuing in nature.

Applying - the middle level of the cognitive domain. It corresponds to the third level of Bloom's taxonomy of cognitive objectives, i.e., application.

Cognitive - one of the domains; includes those outcomes which are mental or intellectual in nature.

Cross cultural/cross gender - providing more than one cultural group or gender perspective, e.g., European, Black, Hispanic, Asian, Native American, handicapped persons, male and female.

Domain - categories of outcomes.

Format - In media centers, the term is used to indicate:

- type of material, e.g., book, periodical, filmstrip
- type of information delivery system, e.g., electronic

Gender fair education - the educational processes which foster the knowledge, respect, and appreciation for the historical and contemporary contributions of men and women to society, as well as those educational processes that reflect the wide variety of roles open to both men and women.

Information system - refers to all types of agencies that organize and disseminate information including public, academic, special, and school libraries, as well as community and governmental agencies, etc.

Integrating - the highest level of the cognitive domain. It corresponds to the fourth, fifth, and sixth levels of Bloom's taxonomy of cognitive objectives, i.e., analysis, synthesis, and evaluation.

Interactive fiction - fiction that involves the reader in making choices about the plot, characters, etc. May be in a print or electronic format.

Interactive video - the use of a microcomputer in conjunction with either a videocassette or a videodisc player to present a program in which a student may view pictures and provide responses.

International/global education - the carefully designed elementary and secondary program that helps students develop the knowledge, skills, and attitudes needed to contribute effectively in an interdependent world characterized by diversity and limited by unequal distribution of natural resources. An international/global perspective means viewing the world and its people with understanding and concern. Understanding requires knowledge of, and respect for, differences and similarities of the world's people, the process of development, and how goods, services, and ideas are exchanged. Concern necessitates assuming responsibility for the needs of all people and commitment to finding just and peaceful resolution to global issues. The desired outcome of global education in Minnesota is to enable citizens in our democracy to participate more actively at local, state, national, and international levels.

Knowing - the lowest level of the cognitive domain. It corresponds to the first two levels of Bloom's taxonomy of cognitive objectives, i.e., knowledge and comprehension.

Multicultural education - educational processes which promote knowledge, understanding, and appreciation of the cultural diversity of our pluralistic society. Special emphasis shall be placed on Asian Americans, Black Americans, Hispanic Americans, Native Americans, and handicapped individuals.

Online Catalogs - catalogs of library/media center resources which can be accessed interactively through the use of online terminals.

Psychomotor - one of the domains; includes those outcomes which are physical or manipulative in nature.

Public access - may refer to the free availability of information or to cable television channels that are available to the public for programming.

BIBLIOGRAPHY

The following bibliography is just a start and contains titles used or recommended by individuals on the various teams involved in the development of this document. Asterisks indicate those titles considered essential for the development of a media curriculum.

American Association of School Librarians and Association for Educational Communications and Technology. MEDIA PROGRAMS: District and School. Chicago: American Library Assocation, 1975.

In order for students to learn comprehensive media and information technology skills, school districts need to provide a basic media program including personnel, materials, equipment, and facilities. These national guidelines will assist school districts in developing and maintaining an excellent media program. The American Association of School Librarians and the Association for Education Communications and Technology are working on a revision of this document but it will probably not be ready for another year or two.

Costa, Arthur, ed. DEVELOPING MINDS. Alexandria, VA: Association for Supervision and Curriculum Development, 1985.

A collection of articles, instruments, references, and other resources useful to educators planning instructional programs to develop students' thinking skills. Page 51 lists the traits of a good thinker and a poor thinker as defined by Glathern and Baron.

Davies, Ruth Ann. THE SCHOOL LIBRARY MEDIA PROGRAM: Instructional Force for Excellence. 3rd ed. New York: Bowker, 1979.

*Hart, Thomas L. INSTRUCTION IN SCHOOL LIBRARY MEDIA CENTER USE (K-12). 2nd Ed. Chicago: American Library Association, 1985.

Designed to "bring together many concepts which will assist the library media specialist in presenting creative and innovative library media center instructional activities," this book covers teaching levels from kindergarten through grade 12. A significant part of the content is the listing of print and audiovisual materials to be used in teaching library/media skills. The activities are taken mainly from published instructional guides. A description of various types of nationally standardized tests is included.

*Holtan, Thea. COMPOSITION AND RESEARCH SIMPLIFIED. Minneapolis: Thea-Thot Press, 206A Saratoga Lane, Minneapolis, MN 55441. 1982. $25.00 plus 6 percent sales tax and 4 percent postage and handling.

The author describes a teacher-designed, student-proven method that focuses on the skills needed in the process of composition, research and speech preparation. It enables students to note key ideas, to recognize relationships among them, to organize them, and to prepare written or oral reports. With this process, students sharpen their thinking skills as they acquire habits of organization and develop a sense of self-reliance.

Martin, Betty and Sargent, Linda. THE TEACHER'S HANDBOOK ON THE SCHOOL LIBRARY MEDIA CENTER. Hamden, CT: Library Professional Publications/Shoe String Press, 1980.

This handbook contains a helpful curriculum section that is directed toward teachers.

Minnesota State Board of Education. LONG-RANGE GOALS FOR MEDIA PROGRAMS. St. Paul, MN: Minnesota State Board of Education, 1983.

Minnesota State Board of Education. MINIMUM GOALS FOR MEDIA PROGRAMS. St. Paul, MN: Minnesota State Board of Education, 1983.

The MINIMUM and LONG-RANGE GOALS FOR MEDIA PROGRAMS were approved by the Minnesota State Board of Education on September 13, 1983. They provide goals for personnel, materials, equipment, and facilities for school media programs. The long-range goals are essentially identical to those in the national guidelines, MEDIA PROGRAMS: District and School.

National Academy of Education. Commission on Reading. BECOMING A NATION OF READERS: The Report of the Commission on Reading. Pittsburgh, PA: National Academy of Education, 1984.

This excellent document was prepared under a contract with the National Institute of Education.

Robbinsdale Schools. MEDIA WORK PLANS FOR THE INTERMEDIATE GRADES. Minneapolis, MN: Robbinsdale Schools, 1981. $12.00. Available from the Publications Department, 4148 Winnetka Avenue North, Minneapolis, MN 55427

The media work plans (lesson plans) are keyed to the Houghton-Mifflin reading series rather than to grade levels. The first section of this thorough curriculum contains philosophy statements, objectives, suggestions for using the media work plans, a sample student record, methods of implementation, correlation with the state department publication, SELOS IN EDUCATIONAL MEDIA (1980) and correlation with the Houghton-Mifflin skills sequence. The rest of the document contains the work plans themselves, grouped by levels K, L and M of the Houghton-Mifflin reading series. Worksheets, overhead originals and resource listings are all included. There is also a publication titled MEDIA WORK PLANS FOR THE PRIMARY GRADES available at the same price.

*SCHOOL LIBRARY MEDIA ACTIVITIES MONTHLY. (Periodical) LMS Associates, 17 East Henrietta Street, Baltimore, MD 21230. Monthly except July and August. $40 for 1 year subscription.

Designed specifically for elementary and middle/junior high school library media specialists, this contains practical ideas, suggestions, and activities needed to operate a successful, skills-oriented library media program. The main focus is on teaching library media skills integrated with the content areas. Each issue contains 6-8 activities in lesson plan format with reproducible teaching aids. Edited and published by H. Thomas Walker and Paula K. Montgomery who also wrote TEACHING LIBRARY MEDIA SKILLS, this is also considered an essential purchase for developing an integrated media curriculum.

Vandergrift, Kay E. THE TEACHING ROLE OF THE SCHOOL MEDIA SPECIALIST. Chicago: American Library Association, 1979. Paper, $6.00

One of the series titled, "School Media Centers: Focus on Trends and Issues," sponsored by the American Association of School Librarians, this lucid essay presents many new insights on the teaching role of the school media specialist. Four subtopics are covered: The School Media Specialist as Teacher, as Teacher of Media, as Teacher in Staff Development, and Evaluation.

*Walker, H. Thomas and Montgomery, Paula Kay. TEACHING LIBRARY MEDIA SKILLS. 2nd edition. Littleton, CO: Libraries Unlimited, 1983.

Based on working programs in the 200 elementary and middle public schools of Montgomery County, Maryland, this book presents a model for integrating media skills instruction into the teaching process. It includes a carefully delineated K-8 media curriculum and a rationale for teaching media skills based on Bloom's Taxonomy. The major part of the book is devoted to sample units in many subject areas and at many levels which integrate media skills and subject knowledge. It is an essential purchase for anyone developing a media curriculum.

Wehmeyer, Lillian Biermann. THE SCHOOL LIBRARIAN AS EDUCATOR. 2nd edition. Littleton, CO: Libraries Unlimited, 1984.

There are unique sections in this book that deal with learning styles, learners with special needs, adaptive education, and teaming with teachers.